CONSTRUCTION NEWS

PERSONALS, ENGINEERING SOCIETIES, ENGINEERING SCHOOLS, READERS' WANTS, INDUSTRIAL NOTES, PUBLICATIONS.

Supplement to ENGINEERING NEWS. New York, July 14, 1904.

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PERSONAL.

Mr. E. L. Corthell will entertain members of the French Institute of Civil Engineers in Great Barrington, Mass., on Sept. 25.

Mr. G. A. Clark has been elected Vice-President and General Manager of the Tennessee Central Railroad Company to succeed N. C. Chapman.

Mr. Harry Sprague, an Elec. Engr., formerly of Shediac, N. B., and Mrs. Robin Brydone-Jack (nee Kate Milliken) were married on June 14 at Vancouver, B. C.

Mr. P. H. Delano has been appointed Division Engineer on the Buffalo & Susquehanna Ry. Co., in charge of construction from Wellsville to Fairview, N. Y.

Mr. James Watson has retired as Engineer of Construction in Chief Engineer C. A. Van Keuren's office, Jersey City, N. J., to accept a position in the City Engineering Department.

Mr. Alexander Kuhn, C. E., of Munich, Germany, has recently toured the Poudre Valley, Colo., studying irrigation methods. Mr. Kuhn is connected with the Agricultural Department of the German government.

Lieutenant Ernest Rotbeck Taylor and Miss Anna Roberts were married in Birmingham, Ala., on July 3. Lieutenant Taylor is a Civil Engineer, in charge of the construction work at the Norwich, Conn., Naval Station.

Mr. Herbert D. Hale, of Boston, has been awarded first place in the competition for designs for the United Engineering Building in New York City. Mr. H. G. Morse, of New York, was associated with Mr. Hale in the design.

The firm of Whitfield & King, of New York, was the successful competitor for the designs of the Engineers' Club building in New York City, part of the $1,500,000 endowment of Mr. Carnegie for a Union engineering home.

Mr. Howard H. Sherwin and Miss Sara I. Davies were married on June 30 at Tecumseh, Neb. Mr. Sherwin is a Civil Engineer, in the service of the Delaware, Lackawanna & Western Railroad Company, with headquarters at Binghamton, N. Y.

Mr. Thomas F. Russum has been elected Manager of the Chicago office of Purdy & Henderson, 1553 Monadnock Block, and will at once take up the duties of that office. Mr. John V. Beekman, Jr., has been elected Manager of the Boston office, 913 Paddock Building.

Mr. Corydon T. Purdy, of Purdy & Henderson, will occupy an office at 114 Liberty St., New York City.

Mr. John L. Hall has been elected Treasurer and will hereafter be connected with the New York office of Purdy & Henderson, 78 Fifth Ave.

Mr. Charles F. Berger has resigned his position as Manager of the New York office of Purdy & Henderson, 78 Fifth Ave., and entirely withdraws from the company to engage in a general contracting business with the Edward Corning Company. Mr. Arthur R. Wheeler has been elected to succeed him.

Mr. Walter H. Whiteside has been appointed General Manager of Sales for all departments of the Allis-Chalmers Company, of Chicago. Mr. Whiteside was Manager of the detail and supply department of the Westinghouse Electric & Manufacturing Company, of Pittsburg, and, at the same time, General Manager of the Sawyer-Man Electric Company, of New York.

Mr. Daniel W. Mead, M. Am. Soc. C. E., of Chicago, has accepted the position of Professor of Hydraulics and Sanitary Engineering at the University of Wisconsin. He will assume the office in September, and will undertake the design and supervision of an extensive hydraulic laboratory. Mr. Mead will not give up his consulting practice, but will retain his present offices in the First National Bank Building, Chicago.

Mr. N. P. Frandsen has opened an office in the Schiller Building, Chicago, for a general engineering business, making a specialty of structural steel work. He has been with A. Bolters & Sons' Iron Works, the Illinois Steel Co.'s structural department, and the Carnegie Co.'s bridge and building department.

The jurisdiction of Mr. R. P. Johnston, Resident Engineer, Engineering Department of the New York Central & Hudson River Railroad Company, is extended to include that portion of the Fall Brook Sub-district, Pennsylvania Division, south of Corning Yard, including Bridge B. C. 3, to succeed Mr. C. K. Lawrence, transferred.

Mr. Carlton E. Davis, of Montclair, N. J., has been appointed Water and Sewer Engineer to the Panama Canal Commission. Mr. Davis has resigned as Resident Engineer of the Newark water storage plant, in course of construction. He will be succeeded by Mr. J. Ralph Van Duyne. Mr. Davis is a graduate of the Massachusetts Institute of Technology.

Mr. J. A. L. Waddell, Senior member of the firm of Waddell & Hedrick, Consult. Bridge Engineers, has established branch offices in Toronto, Ont., and Montreal, Que. Mr. M. C. De Lano, Jr., M. E., has been appointed manager of the Toronto branch, with offices in the Manning Chambers. Mr. G. B. Ashcroft, M., Can. Soc. C. E., 185 St. James St., will represent Mr. Waddell in Montreal.

In the recent reorganization of the Oregon Short Line Railroad Company William Ashton, formerly Resident Engineer, was appointed Chief Engineer; John P. Cougdon, formerly Division Engineer of all divisions, appointed Division Engineer of Idaho Division; H. J. Harris, formerly Assistant Engineer, appointed Division Engineer of Utah Division; R. B. Ketchum, formerly Assistant engineer, appointed Division Engineer of Montana Division.

Mr. K. C. Wesdin, has resigned as Resident Engineer of the Middle Division, Engineering Department, of the New York Central & Hudson River Railroad Co. and the office of Resident Engineer of the Eastern Division has been abolished. Mr. Charles K. Lawrence has been appointed Resident Engineer in charge of construction on the lines east of Minoa, exclusive of the New York and Croton watershed districts, with headquarters at Albany.

Mr. Asa M. Mattice, Chief Engineer of the Allis-Chalmers Co., of Chicago, Ill., has returned to Milwaukee, Wis., from an European trip. The hydraulic machinery works of Escher Wyss & Co., of Zurich, were inspected by Mr. Mattice, who arranged important details concerning the manufacture in the United States of its lines of product. He also inspected the Nurnberg Gas Engine Works, at Nurnberg, and Williams & Robinson's engineering establishment at Rugby, England.

Mr. Ernest W. Schoder, B. S., Ph. D., Jun. Am. Soc. C. E., has been appointed Engineer in Charge of the Hydraulic Laboratory of Cornell University, to succeed Professor Gardner S. Williams, resigned. Mr. Schoder is a graduate of the University of Washington, in the Class of 1900, and has spent the past four years at Cornell University, three of them in taking advanced work in Hydraulics under Professor Williams, for which he received the degree of Ph. D. in 1903; and the last one as his assistant on various hydraulic construction work outside of college.

OBITUARY.

Arthur L. Cox, a veteran civil engineer, died in Santa Rosa, Cal., on July 1. He was 68 years old.

Henry Leighton Marrill, formerly Vice-President of the St. Louis & San Francisco Railroad, died in St. Louis, Mo., on July 6. He was 68 years old.

Adolph Du Faur Faber, Mem. Am. Soc. M. E., died on July 12 at his home in Newark, N. J. He was a life member of the society, a Consulting Engineer and Expert on Patent Causes. He was 41 years old.

John R. Bowen died at his home in Sewickley, Pa., on July 2. He graduated from Cornell University in 1896 and became associated with R. W. Hunt & Co., an engineering firm of Pittsburg. He was 31 years old.

Samuel S. Robinson, a mining expert, died in Detroit. He was the first person to build a bridge on hollow piers. The first of this new type of bridge was erected in New Hampshire nearly 60 years ago, and it is still in use.

William Henry White died in New York on June 3. He became a captain in the Sixth Cavalry, U. S. A., during the Civil War. He was the Vice-President of the Lotos Club and a contracting and consulting engineer. He was 60 year old.

William Allen Butler, a member of the Pierce, Butler & Pierce Manufacturing Co., of Syracuse, N. Y., a 32d degree Mason, and at one time Colonel of the 51st Regiment, N. G. N. Y., died in Syracuse on July 10, aged 52 years. He was graduated from Cornell as a civil engineer in 1872, and for many years served on the engineering corps of various railroads throughout the state.

ENGINEERING SOCIETIES.

COMING MEETINGS.

ROADMASTERS AND MAINTENANCE-OF-WAY ASSOCIATION.
Sept. 13, 14, 15. Annual meeting at St. Louis, Mo., Secy., C. E. Jones, Beardstown, Ill.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.
INSTITUTION OF ELECTRICAL ENGINEERS. (Great Britain.)
Sept. 14, 1904. Joint convention at St. Louis, Mo. Secy. Am. Inst. Elec. E., R. W. Pope, 95 Liberty St., New York.

AMERICAN INSTITUTE OF MINING ENGINEERS.
Sept. 14 to 21. Annual convention at Duluth, Minn., and Houghton, Mich. Secy., R. W. Raymond, 99 John St., New York.

INTERNATIONAL ENGINEERING CONGRESS.
Oct. 3 to 8, 1904. Held at St. Louis, Mo., under the auspices of the American Society of Civil Engineers. Secy., Chas. Warren Hunt, 220 W. 57th St., New York.

AMERICAN STREET RAILWAY ASSOCIATION.
AMERICAN RAILWAY MECHANICAL AND ELECTRICAL ASSOCIATION.
STREET RAILWAY ACCOUNTANT'S ASSOCIATION.
Oct. 10 to 15, 1904. Annual meetings at St. Louis, Mo.

RAILWAY SIGNAL ASSOCIATION.
Oct. 11. St. Louis, Mo., Secy., B. B. Adams, 83 Fulton St., New York.

ASSOCIATION OF RAILWAY SUPERINTENDENTS OF BRIDGES AND BUILDINGS.
Oct. 18, 19, 20. Annual meeting at Chicago, Secy., S. F. Patterson, Concord, N. H.

IRON AND STEEL INSTITUTE (Great Britain).
Oct. 24 to 26, 1904. Annual meeting at New York City. Secy., B. H. Brough, 28 Victoria St., London, S. W.

PACIFIC NORTHWEST SOCIETY OF ENGINEERS.—The second annual convention of the Pacific Northwest Society of Engineers was held in Seattle, Wash., July 1 and 2, 1904. The opening address of the convention was delivered by President C. E. Fowler. The afternoon addresses were delivered by Mr. R. H. Thomson, City Engineer, on "The Municipal Light & Power Plant of Seattle," and Mr. Geo. F. Cotterill, on "An American Engineer Abroad." These addresses were well attended and appreciated by those present.

On the afternoon of July 1 the convention attended a visit to Moran Bros. Co.'s shipyard, where the battleship "Nebraska" is in course of construction, and on the next day a visit was made to the U. S. Naval Station at Bremerton, Wash. Visits were made to the different battleships, the machine shops, and to the coaling station. In the evening of July 1 a banquet was given, which, like the entire convention, was a signal success. The convention was attended by over one hundred members and guests.

INTERNATIONAL ELECTRICAL CONGRESS.—The International Electrical Congress will convene at St. Louis, beginning 9.30 a. m. on Monday, Sept. 12, 1904. The opening ceremonies of the congress will be held in the music hall of the Coliseum, at Olive and 13th Sts. The meetings of the eight sections will follow, commencing at 11 o'clock a. m., in the section halls on the second floor of the Coliseum, the sections adjourning on Monday, at 1.30 o'clock p. m. On Tuesday, Thursday and Friday the sections will meet on the second floor of the Coliseum at 9 o'clock a. m., and will adjourn not later than 1 o'clock p. m.

The International Electrical Congress is held under the auspices of the Louisiana Purchase Exposition, and the following bodies in America are co-operating in the holding of the Congress: The American Institute of Electrical Engineers, The American Electrochemical Society, American Physical Society, The National Electric Light Association, The Association of Edison Illuminating Companies, International Association of Municipal Electricians, The American Electro-Therapeutic Association.

Mr. Elihu Thomson is President and Prof. A. E. Kennelly, Cambridge, Mass., Secretary of the Congress. The proceedings of the congress will be published in two or three large volumes, of which a copy will be sent free to all members. The membership fee is $5, by sending which to the secretary any one interested may become enrolled as member.

It is probable that a Chamber of Delegates will meet in connection with the congress, as at Chicago in 1893 and at Paris in 1900, for the purpose of reaching agreement between the governments of the civilized world on various questions of standardization. Many governments have already appointed delegates for this purpose.

The work of the congress itself will, as already suggested above, be carried on by sectional meetings. There are to be eight sections, whose subjects and officers are as follows:

Section A, "General Theory," Prof. E. L. Nichols, Cornell University, Chn.; Prof. H. T. Barnes, McGill University, Secy. Section B, "General Applications," Prof. C. P. Steinmetz, Union College, Chn.; Prof. Samuel Sheldon, Brooklyn, N. Y. Secy. Section C, "Electrochemistry," Prof. H. S. Carhart, University of Michigan, Chn.; Mr. Carl Hering, Philadelphia, Pa., Secy. Section D,

"Electric Power Transmission," Mr. C. F. Scott, Pittsburg, Pa., Chn.; Prof. Louis Bell, Boston, Mass., Secy. Section E, "Electric Light and Distribution," Mr. J. W. Lieb, Jr., New York, Chn.; Mr. Gano S. Dunn, New York, Secy. Section F, "Electric Transportation," Prof. Louis Duncan, Mass. Inst. Technology, Chn.; Mr. A. H. Armstrong, Schenectady, N. Y., Secy. Section G, "Electric Communication," Mr. F. W. Jones, New York, Chn.; Mr. B. Gherardi, New York, Secy. Section H, "Electrotherapeutics," Prof. W. J. Morton, New York, Chn.; Mr. W. J. Jenks, New York, Secy.

UNITED ENGINEERING BUILDING.—During the past week the architects for the two parts of the United Engineering Building in New York were selected by the conference committee of the engineering societies concerned in the Carnegie gift.

It was the expressed wish of Mr. Carnegie that the competition should be a mixed one, so that in addition to selecting six competent architects, the committee threw the work open to all comers and provided a prize scheme to compensate the best competitors in the open class. The committee received 26 complete sets of competitive plans for the two buildings, comprising over 500 drawings, and, with the assistance of Prof. W. R. Ware as expert adviser, has spent a good deal of time in the consideration of these designs, all of which, of course, were submitted anonymously. The conclusions now reached are unanimous. The successful competitor for the United Engineering Building is Mr. Herbert D. Hale, of Boston, a competitor in the open class, with Henry G. Morse, of New York, as associate architect. Mr. Hale is a grandson of Edward Everett Hale and has done a large amount of public architecture in New England and has constructed some Carnegie libraries, besides doing a very considerable amount of work for the New York Shipbuilding Company. The successful competitors for the Engineers' Club are Whitfield & King, of New York, who were among the selected architects; they have done a large amount of work in New York City and on various Carnegie libraries, and were also associated in work on the buildings of the Pan-American Exposition. The designs of this firm were also among those favorably considered for the United Engineering Building, awarded to Mr. Hale. The successful competitors in the open class for four equal prizes of $400 each, in addition to Mr. Hale, are: Trowbridge & Livingston, of New York; Frank C. Roberts & Co., with Edgar V. Seeler, Philadelphia, associate; and Allen & Collins, of Boston. It is interesting to note that a very large proportion of the competitive designs came from Boston and that the largest prize, namely, the award for the United Engineering Building, as well as one of the smaller money prizes, has gone to that city.

The two buildings will require for construction from $1,100,000 to $1,200,000. The United Engineering Building will occupy land 125 ft. front by 100 ft. on West 39th St., while the Engineers' Club building, with a frontage of 50 ft. and a depth of 100 ft., will face on Bryant Park and the new Public Library. The United Engineering Building, aside from quarters for the American Society of Mechanical Engineers, the American Institute of Electrical Engineers and the American Institute of Mining Engineers, as well as other societies enabled to participate in the accommodations, will have several fine auditoriums and a magnificent library. The Club building will be about 11½ stories high, with the usual accommodations of a club and some 60 or 70 bedrooms for members. The work of tearing down the old buildings and the construction of the new is to be pushed vigorously and will begin forthwith.

CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.), and Bidding Sheets (B. S.), may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close	Work.	Place.	On file.	See issue.
July				
*14	Paving	Towson, Md.	S. & B. S.	6-23
16	Generator sets.	Washington, D.C.	S.	6-30
16	Brick stack, etc.	Washington, D.C.	S.	6-30
*16	Dredging.	New York, N. Y.	S.	6-30
16	Frame bldg.	Charleston, S. C.	S.	6-23
16	Coal bunkers.	Boston, Mass.	S.	7- 7
18	Water-works.	Mayfield, Cal.	S.	6-30
16	Power plant apparatus.	Boston	S.	6-30
*26	Dredging.	Chicago, Ill.	S.	6-30
30	Naval Bldg.	Bremerton, Wash.	S.	6-30
Aug.				
6	Shops, bldg.	Pensacola, Fla.	S.	7- 7

*Work advertised in Engineering News.

NOTE.—We are desirous of securing specifications and bidding sheets (and plans when not too bulky) of pending work for file in our New York office for the benefit of contractors or others who may be interested in the work. If more sets than one are sent us we shall be pleased to distribute these to contractors who ask for them. When the work is advertised in Engineering News, note that the plans are filed with us will be added to the advertisement without cost.

LIST OF CONTRACTS PENDING.

Bids close. Work. Place. See issue.

LIGHT, HEAT AND POWER PLANTS.

July 15. Street lighting, Plattsburg, N. Y. ..... Jun. 30
July 16. Power plant apparatus, Boston, Mass. ..... Jun. 30
July 16. Generator sets, Washington, D. C. ..... Jun. 30
July 18. Steam heatg. apparatus, Lawrence, Mass. Jun. 30
Advertised, Eng. News, Jun. 30 to July 14.
July 18. Electric fixtures, San Diego, Cal. ..... Jun. 30
July 20. Electric light bonds, Watkins, N. Y. ..... Jun. 23
Advertised, Engineering News, June 23.
July 22. Electric lighting, Spain (Foreign) ..... July 7
July 25. Power house, etc., Batavia, N. Y. ..... July 7
Advertised, Eng. News, July 7, to 28.
July 28. Electric light plant, Washington, N. C. ..... July 14
Advertised, Eng. News, July 14 to 28.
July 30. Electric lighting, Spain (Foreign) ..... July 14
Aug. 1. Street lighting, Salem, Ore. ..... July 14
Aug. 2. Acetylene plant, Ft. Myer, Va. ..... July 7
Aug. 31. Canal power, Chicago, Ill. ..... July 14

BRIDGES.

July 14. Bridges, Bloomfield, Ind. ..... Jun. 23
July 14. Bridge, Eureka, Cal. ..... Jun. 30
July 14. Bridge, Arcata, Cal. ..... July 7
July 14. Bridge, Pittsburg, Pa. ..... July 7
July 15. Bridge, iron, Kittanning, Pa. ..... July 7
July 15. Bridges, Fargo, N. Dak. ..... July 14
July 15. Bridge, steel, Franklin, Pa. ..... July 14
July 16. Bridge, repair, Connersville, Ind. ..... July 7
July 16. Trestle, Davenport, Wash. ..... July 7
July 16. Bridge, Noblesville, Ind. ..... Jun. 30
July 18. Bridge, Newport, Ind. ..... Jun. 30
July 18. Bridge, Los Angeles, Cal. ..... Jun. 9
Advertised, Engineering News, Jun. 9.
July 18. Culvert, concrete, Shreveport, La. ..... July 14
July 18. Bridge, iron, Pekin, Ill. ..... July 14
July 18. Bridges, wooden, Brigham City, Utah ..... July 14
July 18. Bridge, Concord, Cal. ..... July 14
July 18. Bridge, Titusville, Pa. ..... July 7
July 19. Bridges, Columbus, O. ..... Jun. 30
July 20. Trestle, timber, Chicago, Ill. ..... May 26
July 20. Bridges, steel, Chicago, Ill. ..... Jun. 23
Advertised, Eng. News, June 23 to July 21.
July 20. Bridges, pile, Ogalalla, Neb. ..... July 14
July 21. Bridge, superstructure, Boston, Mass. ..... July 14
July 21. Bridges, Moscow, Idaho. ..... Jun. 23
July 22. Bridge, Fort Benton, Mont. ..... Jun. 30
July 23. Bridge, Denver, Colo. ..... Jun. 30
Advertised, Eng. News, Jun. 30 and July 7.
July 23. Bridges, Marion, Ind. ..... July 14
July 23. Substructure, steel, Newcastle, Ind. ..... July 14
July 25. Culvert, concrete-steel, Los Angeles, Cal. ..... Jun. 30
July 25. Draw bridge, steel, Green Bay, Wis. ..... July 14
July 27. Bridge, concrete-steel, Cleveland, O. ..... July 7
July 27. Bridge, iron, Lima, O. ..... July 14
July 30. Culvert, Des Moines, Ia. ..... July 14
July 31. Bridge, Sobieski, Wis. ..... Jun. 23
Advertised, Eng. News, Jun. 23 to July 14.
Aug. 2. Bridge, abutments, Versailles, Ind. ..... July 14
Aug. 6. Bridge, steel, Marion, Ind. ..... July 14

BUILDINGS.

July 14. Post office, St. Joseph, Mo. ..... Jun. 16
July 14. Post office extension, St. Joseph, Mo. ..... Jun. 16
July 14. Heating, sewers, etc., Indianapolis, Ind. ..... Jun. 30
July 14. Jail, Olivia, Minn. ..... July 7
July 14. Plumbing, heating, etc., Indianapolis, Ind. ..... July 7
July 15. Telephone building, Sioux City, Ia. ..... July 7
July 15. Court house, Hamburg, Ark. ..... Jun. 16
July 15. Library, Littlefalls, Minn. ..... July 14
July 15. Metal roofs, etc., Chicago, Ill. ..... July 14
July 16. Office building, Wheeling, W. Va. ..... July 14
July 16. Remodeling court house, Wellston, O. ..... July 14
July 16. Frame building, Charleston, S. C. ..... Jun. 23
July 16. Buildings, boiler house, Dayton, O. ..... July 7
July 18. Library, Carroll, Ia. ..... July 14
July 18. Court house, Cripple Creek, Colo. ..... July 14
July 18. Church, Springfield, Mo. ..... July 14
July 18. Schools, New York, N. Y. ..... July 14
July 19. Steam heating, etc., Mansfield, O. ..... July 14
July 19. Jail, New Brighton, N. Y. ..... July 14
July 20. Heating, etc., Columbus, Miss. ..... July 14
July 20. Hospital, New York, N. Y. ..... July 14
July 20. Y. M. C. A. building, Pensacola, Fla. ..... July 7
July 20. Post exchange, etc., Jefferson, Mo. ..... Jun. 30
July 22. Heating apparatus, etc., Wauseon, O. ..... July 14
July 23. Jail additions, Pittsburg, Pa. ..... July 14
July 23. Theater, etc., Emmetsburg, Ia. ..... July 14
July 25. Remodeling court house, Houston, Va. ..... July 14
July 23. Library, Hammond, Ind. ..... July 14
July 25. Building alterations, Batavia, N. Y. ..... July 14
July 25. Buildings, Bedford, N. Y. ..... July 14
July 26. Foundation, Washington, D. C. ..... July 7
Advertised, Eng. News, July 7 to 28.
July 27. Roofing, Hoboken, N. J. ..... July 7
July 27. Steel cells, Mansfield, O. ..... July 7
July 27. Hospital, New York, N. Y. ..... July 14
July 28. Workhouse, New York, N. Y. ..... July 14
July 28. Heating and ventilating, Salt Lake City ..... July 7
July 30. Jail plans, Bisbee, Ariz. ..... Jun. 30
July 30. Naval building, Bremerton, Wash. ..... Jun. 30
Aug. 1. Post office, Marysville, Ky. ..... Jun. 30
Advertised, Eng. News, Jun. 30 to July 14.
Aug. 1. Jail, Aberdeen, Miss. ..... Jun. 23
Aug. 2. Post office, Pierre, S. Dak. ..... Jun. 30
Advertised, Eng. News, Jun. 30 to July 14.
Aug. 2. Laundry, etc., Washington, D. C. ..... July 14
Aug. 4. Post office bldg., Hutchison, Kan. ..... July 7
Aug. 6. Shops, building., Pensacola, Fla. ..... July 7
Aug. 8. Post office, Pekin, Ill. ..... July 7
Advertised, Eng. News, July 7 to 21.
Aug. 18. Post office, Wausau, Wis. ..... July 14
Aug. 25. Cathedral plans (Foreign), Roumania ..... July 7
Sept. 10. High school, Missoula, Mont. ..... Jun. 30

WATER SUPPLY AND IRRIGATION.

July 14. Water-works, Elberton, Ga. ..... Jun. 30
Advertised, Eng. News, Jun. 30 and July 7.
July 14. Water and sewer pipe, etc. San Diego, Cal. Jun. 2
July 16. Water-works, Eldridge, Ia. ..... Jun. 30
Advertised, Engineering News, Jun. 30.
July 16. Water-works, Walpole, N H. ..... July 14
July 16. Water main, Goshen, Ind. ..... July 14
July 18. Reservoir, Lima, O. ..... Jun. 30
Advertised, Eng. News, Jun. 30 to July 21.
July 18. Fire hydrants, pipe, Winnipeg, Man. ..... Jun. 30
Advertised, Engineering News, Jun. 30.
July 18. Water-works, Mayfield, Cal. ..... Jun. 30
July 18. Water-works franchise, Tiffin, O. ..... Jun. 23
July 19. Water pipe, Wilton, N. H. ..... July 7
Advertised, Engineering News, July 7.
July 21. Pumping plant, Cleveland, O. ..... July 14
July. 22. Water mains, Juniata, Pa. ..... July 14
July 23. Reservoir system, Cameron, Mo. ..... July 14
July 23. Well, Denver, Colo. ..... July 7
July 23. Water-works, Cameron, Mo. ..... July 7
Advertised, Eng. News, July 7 and 14.
July 23. Water pipe and specials, Washington, D. C. Jun. 23
Advertised, Engineering News, June 23.
July 25. Water system, St. Paul, Minn. ..... July 14

Write our advertisers when you intend to buy your supplies and machinery for improvements, or for carrying out your contracts. If you do not find what you want in our advertising pages write us for list of firms, and we will put you in communication with them at once.

July 25. Cast-iron pipe, East Orange, N. J. ..... July 14
Advertised, Eng. News, July 14 and
July 26. Water-works, Horseheads, N. Y. ..... July 14
Advertised, Eng. News, July 14
July 27. Water mains, New York, N. Y. ..... July 14
July 27. Water-works, Macon, Miss. ..... July 14
Advertised, Eng. News, July 14 and
July 28. Water-works, Frederic, Wis. ..... July 14
July 28. Water-works, Danville, Ky. ..... July 14
Advertised, Eng. News, July 14 and
Aug. 1. Water-works (Foreign), Austria-Hun. ..... July 7
Aug. 1. Tunnel, Lorain, O. ..... July 14
Aug. 3. Water-works, Rockport, O. ..... July 14
Aug. 8. Pumping engine, Brandon, Man. ..... July 14
Advertised, Eng. News, July 14 and
Aug. 15. Franchise, water pipes, Pinole, Cal. ..... July 14
Aug. 18. Water supply and electric light, Italy ..... Apr. 21
Advertised, Eng. News, Apr. 14 to Ma
Aug. 30. Cast-iron pipes, Java (Foreign) ..... July 14
Advertised, Eng. News, July 14 and
No date. Water-works, Russellville, Ky. ..... Jun. 23
Advertised, Eng. News, June 23 and
No date. Water tank, etc., Onancock, Va. ..... Jun. 30
Advertised, Eng. News, Jun. 30 and Ju

SEWERAGE.

July 14. Sewerage, Xenia, O. ..... July 7
July 14. Sewers, Boise, Idaho. ..... Jun. 16
Advertised, Eng. News, Jun. 16 to 30.
July 15. Sewers, Jerseyville, Ill. ..... May 19
July 15. Sewers, Dixon, Ill. ..... July 14
July 15. Septic tank, Greensboro, N. C. ..... July 14
July 16. Sewers, Wiarton, Ont. ..... July 14
July 16. Trunk sewer, Newport, Ky. ..... July 7
Advertised, Engineering News, July 7.
July 18. Sewers, Ogden, Utah. ..... Jun. 30
July 18. Sewers, Des Moines, Ia. ..... July 14
July 19. Sewers, Boston, Mass. ..... July 7
July 20. Sewers, Elmwood Place, O. ..... Jun. 30
July 20. Sewers, Havana, Ill. ..... July 14
July 21. Sewer, Newark, O. ..... July 14
July 21. Sewers, Ames, Ia. ..... Jun. 30
Advertised, Engineering News, Jun. 30.
July 21. Sewers, Ithaca, N. Y. ..... July 7
Advertised, Engineering News, July 7.
July 22. Sewers, Dayton, O. ..... Jun. 30
Advertised, Eng. News, Jun. 30 to July 14.
July 22. Sewers, tank, etc., Urbana, Ill. ..... July 14
Advertised, Eng. News, July 14.
July 22. Sewers, Ingram, Pa. ..... July 14
July 25. Sewerage, Eureka Springs, Ark. ..... July 7
July 25. Sewerage, Washington, D. C. ..... July 14
Advertised, Eng. News, July 14.
July 26. Sewer, Virginia, Minn. ..... July 14
July 26. Pumping station, sewers, Chicago, Ill. ..... July 14
July 27. Sewers, Gran Rapids, Mich. ..... July 14
July 28. Sewers, Woonsocket, R. I. ..... July 14
Advertised, Eng. News, July 14 and 28.
Aug. 2. Drain, etc., Roanoke, Va. ..... July 7
Advertised, Eng. News, July 7 to Aug. 4.
Aug. 8. Sewage disposal, etc., Washington, D. C. ..... July 14
Advertised, Eng. News, July 14.

STREETS AND ROADS.

July 14. Roads, Sullivan, Ind. ..... Jun. 23
July 14. Paving, Towson, Md. ..... Jun. 23
Advertised, Engineering News, June 23.
July 14. Paving, etc., Akron, O. ..... July 7
July 15. Paving, Watertown, N. Y. ..... July 7
Advertised, Engineering News, July 7.
July 15. Curbing, Hartington Neb. ..... July 7
July 15. Grading, Cheshire, Conn. ..... July 7
July 15. Grading, Des Moines, Ia. ..... Jun. 30
July 15. Road, Pickens, S. C. ..... July 14
July 15. Repairing streets, Paterson, N. J. ..... July 14
July 16. Sidewalks, cement, Spencer, Ind. ..... July 14
July 16. Paving, etc., De Kalb, Ill. ..... July 14
July 16. Road, gravel, Portland, Ind. ..... Jun. 30
July 16. Paving, asphalt, Seattle, Wash. ..... July 7
July 16. Roads, Pittsburg, Pa. ..... July 7
July 16. Roads, Port Townsend, Wash. ..... July 7
July 18. Paving brick, Binghamton, N. Y. ..... Jun. 30
Advertised, Eng. News, Jun. 30 to July 14.
July 18. Sidewalks, brick, Sedalia, Mo. ..... July 14
July 18. Road, Riverside, Cal. ..... July 14
July 18. Curbs, Wichita, Kan. ..... July 14
July 18. Paving, Shreveport, La. ..... July 14
July 18. Paving, etc., Albany, N. Y. ..... July 14
July 18. Paving, Auburn, N. Y. ..... July 14
July 18. Paving, Ogden, Utah. ..... July 14
July 19. Paving, etc., Escanaba, Mich. ..... July 14
July 19. Paving, Du Bois, Pa. ..... July 14
July 19. Paving, Columbus, O. ..... Jun. 30
July 19. Paving, Oberlin, O. ..... Jun. 30
July 19. Paving, etc., Montpelier, Ind. ..... Jun. 30
July 19. Macadamizing, New York, N. Y. ..... July 7
July 19. Road, Dillon, Mont. ..... July 7
July 20. Curbing, Des Moines, Ia. ..... July 7
July 20. Macadamizing, Cincinnati, O. ..... Jun. 30
July 20. Roads, Ottawa, O. ..... Jun. 30
July 20. Grading, Chicago, Ill. ..... May 26
July 21. Macadamizing, etc., La Crosse, Wis. ..... Jun. 30
July 21. Macadamizing, etc., Akron, O. ..... July 14
July 21. Paving, Des Moines, Ia. ..... July 14
July 22. Paving, Cleveland, O. ..... July 14
July 22. Paving, Cincinnati, O. ..... Jun. 30
July 22. Paving, etc., Salt Lake City, Utah ..... July 7
Advertised, Eng. News, July 7 to 28.
July 23. Roads, Greenville, O. ..... July 7
July 23. Paving, etc., Des Moines, Ia. ..... July 14
July 23. Sidewalks, Norfolk, Va. ..... July 14
July 25. Macadam, Winston, N. C. ..... July 7
Advertised, Eng. News, July 7 and 14.
July 25. Road, Bowling Green, O. ..... July 7
July 25. Paving, brick, South Bend, Ind. ..... Jun. 23
July 27. Paving, Hoboken, N. J. ..... July 14
July 30. Roads, Greenville, O. ..... July 7
Aug. 1. Paving, vitrified brick, Toledo, O. ..... July 7
Aug. 2. Roads, Napoleon, O. ..... July 7
Aug. 3. Paving, brick, Cincinnati, O. ..... July 14
Aug. 11. Grading, Oswego, N. Y. ..... July 14
Advertised, Eng. News, July 14 to Aug. 11.

MISCELLANEOUS CONTRACTS.

July 14. Railway (Foreign), Peru. ..... Apr. 21
July 14. Tow boat and snag boat, Ottawa, Ont. ..... Jun. 30
July 14. Dam, Waco, Tex. ..... Jun. 30
July 15. Canal construction, Leetville, Nev. ..... Jun. 2
Advertised, Eng. News, Jun. 2 to July 6.
July 15. Electric railway, Hamilton, Ont. ..... July 7
Advertised, Eng. News, July 7 and 14.
July 15. Wharf, New London, Conn. ..... July 14
July 15. Tunnel, Jeddo, Pa. ..... July 14
July 16. Walls, etc., Cartersville, Ga. ..... July 14
July 16. Coal bunkers, Boston, Mass. ..... July 14
July 16. Wharf, Port Townsend, Wash. ..... July 14
July 16. Boat bunkers, Washington, D. C. ..... July 7
July 16. Fire-alarm system, Watertown, Wis. ..... July 7
July 16. Dredging, Jacksonville, Fla. ..... Jun. 23
Advertised, Eng. News, June 23 to July 21.

July 16. Dredging, New York, N. Y.....Jun. 23
Advertised, Eng. News, June 23 to July 21.
July 16. Brick stack, etc., Washington, D. C. .....Jun. 30
July 16. Generator, sets, Washington, D. C.....Jun. 30
July 18. Dredging, New Orleans, La. .....Jun. 23
Advertised, Eng. News, Jun. 23 to July 14.
July 18. Breakwater, Cleveland, O. .....Jun. 30
July 18. Steel filing case, Bradford, Pa. .....Jun. 30
July 18. Rock, New Orleans, La. .....July. 7
July 18. Dredging, Wilmington, Del.....July 14
Advertised, Eng. News, July 14.
July 19. Naval supplies, Washington, D. C.....July 7
July 19. Lamps, bolts, motor, etc., Washington,..Jun. 30
July 20. Harbor improvements, Italy (Foreign)....July 14
July 20. Piles, Youngstown, O. .....July 14
July 21. Dike, Boston, Mass. .....July 14
July 21. Dredging, Montgomery, Ala.....July 14
Advertised, Eng. News, July 14.
July 21. Dredging, Jacksonville, Fla.....Jun. 23
Advertised, Eng. News, June 23 to July 21.
July 23. Drainage system, Delaware City, Del. .....July 7
July 23. Drainage system, Delaware City, Del.....Jun. 30
Advertised. Eng. News, Jun. 30 to July 21.
July 24. Dry-dock, Belgium (Foreign).....Apr. 21
July 24. Port improvements (Foreign), Roumania..July 7
July 25. Coal shed, Fort Screven, Ga.....Jun. 30
Advertised. Eng. News, Jun. 30 to July 28.
July 25. Stone, Boston, Mass. .....Jun. 30
Advertised, Eng. News, Jun. 30 to July 28.
July 26. Screws, shovels, bolts, etc., Washington .Jun. 30
July 26. Dredging, Chicago, Ill. .....Jun. 30
Advertised, Eng. News, Jun. 30 to July 28.
July 26. Subway, Savannah, Ga.....July 14
July 27. Cement, Cincinnati, O. .....July 7
July 28. Concrete culvert, Richmond, Va. .....Jun. 30
Advertised. Eng. News, Jun. 30 to July 21.
July 28. Supplies, Memphis, Tenn.....July 14
Advertised, Eng. News, July 14 and 21.
July 28. Levee work, Memphis, Tenn.....July 14
Advertised, Eng. News, July 14 and 21.
July 29. Steelwork, South Africa (Foreign).....July 14
July 30. Dredging, Washington, D. C. .....July 7
July 31. Sugar factory, Zululand (Foreign).....July 14
Aug. 1. Tunnel, Lorain, O. .....July 14
Aug. 1. Ditch, Chaska, Minn.....July 14
Aug. 1. Dredging, Portland, Me. .....July 7
Advertised, Eng. News, July 7 to Aug. 4.
Aug. 5. Lock gates, Egypt (Foreign).....July 14
Aug. 8. Oils, Cape Colony (Foreign).....July 14
Aug. 8. Vessel yard, Duluth, Minn.....July 14
Advertised, Eng. News, July 14 to Aug. 11.
Aug. 9. Breakwater, Washington, D. C.....July 7
Aug. 15. Rolling stock, Siam (Foreign) .....Apr. 21
Aug. 17. Locks, dams, Vicksburg, Miss.....Jun. 16
Advertised, Eng. News, Jun. 16 to July 28.
Aug. 17. Locks and dams, Vicksburg, Miss.....Jun. 23
Advertised, Eng. News, Jun. 23 to Aug. 18.
Aug. 22. Canal, New Orleans, La.....July 14
Aug. 24. Excavating, cofferdams, Chicago, Ill. .....Jun. 30
Aug. 27. Dry-dock, New York, N. Y.....July 14
Oct. 15. Plans for harbor, Sweden (Foreign).....Apr. 21
No date. Street railway franchise, Shanghai, China. May 19
Advertised, Eng. News, May 19 to Jun. 30.
No date. Dredging, Perth Amboy, N. J.....July 7
Advertised, Engineering News, July 7.
No date. Dredging, Wilmington, Del.....July 14
Advertised, Eng. News, July 14.

RAILWAYS.

BIRMINGHAM, MONTGOMERY & NEW ORLEANS RY.—W. C. Ambrose, Ch. Engr. of Construction, Birmingham, Ala., writes us as follows:

"I expect to have the letting of some railroad work some time next month. It will be about as follows:

"Section A. Bessemer, Ala., to Billingsley, Ala.; 78 miles.—Approximately: 300,000 cu. yds. solid rock; 650,000 cu. yds. loose rock; 1,850,000 cu. yds. earth. Section B. Montgomery, Ala., to Greensboro, Ala.; 90 miles.—Approximate quantities: 220,000 cu. yds. solid rock; 450,000 cu. yds. loose rock; 2,030,000 cu. yds. earth. Section C. Centreville, Ala., to Meridian, Miss.; 120 miles.—Approximate quantities: 180,000 cu. yds. solid rock; 410,000 cu. yds. loose rock; 1,810,000 cu. yds. earth.

"I would be glad to hear from contractors having outfits and the standing to handle one of these sections, and to them I will send specifications, forms and profiles as soon as the work is authorized, which will most likely be about the first of August. There will also be pile and frame trestles, concrete culverts, concrete and stone piers, and other work to let in this contract. Later we will have steel bridges, station and other buildings and shops. But now we will only let grading and masonry. Please say that while I am glad to hear from all engineers looking for work, and will, in time, get to answer them, that just now I am so busy that their letters are being overlooked. I will have work for quite a number of them later on."

CANADA ATLANTIC RY.—It is reported from Ottawa that the Government is at the present time negotiating with W. Booth for the purchase of this line, the price for which is to be $20,000,000. As soon as the sale is concluded an order in Council will be passed leasing the road to McKenzie & Mann, of the Canadian Northern.

CANADIAN NORTHERN RY.—The Canadian Government has been asked by the Regina, Assa., Board of Trade to guarantee the bonds for the extension of the Hartney line into Regina. Company has charter, and the road has been surveyed. The proposed line will run between the C. P. R. main line and the C. P. R. Arcola Branch line, 45 miles apart at the widest place.

CENTRAL ONTARIO RY.—The Court of Appeal has decided that the lower court has power to direct the sale of this railway to satisfy the bondholders' claims, trustees for whom was the Toronto General Trusts Corporation. The road will now be sold.

CHERRYTREE & DIXONVILLE RY.—The contract for the extension of this road, from Diamondville to a point on Dixon Run, Pa., six miles in length, has been awarded to D. F. Keenan, of Philadelphia.

CHICAGO, BURLINGTON & QUINCY.—We are informed by Daniel Willard, 2d Vice-Pres., that the following changes went into effect on the 1st inst.: The lines of this company will be operated as two Grand Divisions, to be known as Lines East of the Missouri River, and Lines West of the Missouri River, each being under the jurisdiction of a general manager. The lines east of the Missouri River will be subdivided into three districts, designated as Illinois District, Iowa District, Missouri District, each of these districts to be under the direction of a general superintendent, who will report to the general manager of that grand division. The Illinois District will be subdivided into five operating divisions, to be known as the Chicago Division, Aurora Division, Galesburg Division, Beardstown Division, La Crosse Division. The Iowa District will be subdivided into three operating divisions, to be known as Burlington Division, Ottumwa Division, Creston Division. The Missouri District will be subdivided into four operating divisions, to be known as Hannibal Division, Brookfield Division, St. Joseph Division, Centerville Division. The grand division west of the Missouri River will be subdivided into five operating divisions, as now, to be known as Lincoln Division, Wymore Division, McCook Division, Alliance Division, Sheridan Division.

CINCINNATI, HAMILTON & DAYTON.—This road has purchased the Pere Marquette Ry. and the Chicago, Cincinnati & Louisville Ry. The new system will probably be known as the Cincinnati, Hamilton & Dayton Railroad. New officials are: President, Eugene Zimmerman; Vice-President and General Manager, G. M. Cummings. The headquarters of the Cincinnati, Hamilton & Dayton will remain in Cincinnati, O.

EDMONTON & SLAVE LAKE RY.—Company will build north from Edmonton, Alta., for a distance of about 50 miles, starting from the junction of the E. Y. & G., near the Groat Estate, to St. Albert, and north to its termination in N. W. 35-59-25. Wm. McKenzie, Pres., and H. M. McLeod, Ch. Engr. The new line will form a portion of the Canadian Northern Ry. system.

GAINESVILLE, JEFFERSON & SOUTHERN.—This road was sold at Gainesville, Ga., recently, by Samuel C. Dunlap, special master. The road was sold in sections, the first part put upon the block being 55 miles, running from Gainesville to Jefferson, and from Belmont to Monroe. This was purchased by George J. Baldwin and W. W. Mackall, of Savannah, representing a syndicate, the upset price being $165,000. The second part offered was the ten miles from Monroe to Social Circle, the upset price being fixed by the court at $30,000. Jacob Phinizy, representing the Georgia Railroad, bid this amount, and the section was knocked down to him. The road will be made a broad gage.

GUTHRIE, FAIRVIEW & EASTERN.—Company has voted to issue $3,500,000 of bonds to build its proposed line from Fairview, Okla. (connecting there with the Kansas City, Mexico & Orient Ry.), to Oklahoma City, with a spur to Guthrie. Among those interested are W. S. McCaull, L. Underwood, G. W. Cowles and J. C. Premble, of Kansas City, who are reported as saying that the bonds have already been underwritten.

INTERSTATE RY.—A. C. Titus, Ch. Engr., Ottawa, Kan., writes us that he has made surveys and examinations, and estimated cost of construction of this road. The line is being financed, with every prospect of beginning construction in the Fall.

MENA, HOT SPRINGS & EASTERN RY.—Reports state that W. A. Carroll, Pres. of the Mena & Black Springs Railroad Co., has filed an amendment to the charter of the company in Arkansas. By this the name of the road is to be changed to the Mena, Hot Springs & Eastern Railroad Co., and an addition of 50 miles to the original 35 is provided for. The capital stock is increased from $500,000 to $2,250,000. The company was originally chartered in September, 1902, for the purpose of constructing a line of railroad from Mena to Black Springs, Ark. The survey for the proposed line has been completed and the construction contract awarded. Work has already been begun on the grading at Mena, and within 60 days it will be in progress on both ends of the line. The road will be ready for operation about Nov. 1, 1905. In connection with the railroad the Arkansas Exploration Co. has been chartered as a construction adjunct, with a capital stock of $500,000. Half of this amount has been subscribed.

RIO GRANDE & NUECES VALLEY.—San Antonio, Tex.—Reports state that the contract for the first 20 miles of railroad from Cotulla to Carrizo Springs, to be called the Rio Grande & Nueces Valley Railroad, has been let, and the work of construction will begin at Cotulla within 30 days. The contract was awarded to Ward & Lee, of Palestine, Tex. This news is given out by W. A. Squeers, a well-known railroad promoter and builder, who is the representative of the Lee syndicate, who is behind the movement. The road will be built to a point 12 miles northwest of Carrizo, where a town will be located, to be known as Shaw City. Donations amounting to $125,000 cash and 15,000 acres of land have been secured.

ST. MARY RIVER RY.—This railway will be extended this year to Kimball, N. W. T., 14 miles beyond Cardston. Contracts are now being let, and work will commence at once.

SOUTHERN.—It is said that extensive freight yards will be constructed between city limits of Atlanta, Ga., and the Chattachoochee River.

TRANS-CANADA RY.—This company has been approved by the Committee of the House of Commons. Capital stock was placed at $2,000,000, 15% of which must be spent in construction work within two years, and the road finished in eight years.

NEW INCORPORATIONS AND CHARTERS.

ATHENS NORTHERN.—O.—This company has been incorporated by C. C. Guthrie, C. E. Ellis, M. T. Reed and others, of Columbus, O., with $1,000 capital. The line will run from Waterloo in Mineral township, through Athens, Perry, Morgan and Muskingum counties, to Zanesville.

BULLY HILL & COPPER CITY RY.—Tex.—This company has been incorporated with a capital of $20,000, by H. A. Cohen, J. B. Keating, J. W. Schoonover and others. It is proposed to build a railroad from the Bully Hill smelter to the Anchor mine.

ILLINOIS VALLEY, ILL.—Company has been incorporated with offices at La Salle, Ill., to build from Joliet southwest to Morris, thence west to Marseilles, Ottawa, Utica, La Salle, and Peru, thence west to Spring Valley, Ladd, and Princeton. Incorporators: F. W. Bedard, La Salle; H. E. Chubbuck, V. J. Duncan, A. F. Shoch, and C. E. Hook, of Ottawa. Capital, $100,000.

KANKAKEE & MOLINE RY.—Ill.—This company, with its principal office in Chicago, has been incorporated with a capital stock of $100,000. The road is to be constructed from Kankakee, Kankakee County Ill., to Moline, Rock Island County, Ill. The incorporators and first board of directors are William R. Burleigh, Lagrange, Ill.; Gideon S. Thompson, Berwyn, Ill., and Harry Hamill, W. J. Gilbert and C. C. Green, of Chicago.

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

LITTLE BAY & HAMPTON.—Ark.—Company has been chartered to build a line from Little Bay to Gordon, Ark. in Calhoun County, a distance of ten miles. The capital stock is placed at $20,000. The directors are: H. M. McLachlin, Fannie E. Guiber, W. T. Murray, L. N. Smyth and W. H. Pumphrey.

OAK GROVE & GEORGETOWN.—Ala.—This railroad has been chartered to build from Oak Grove to Georgetown, Ala., and through that village towards Leaksville, Miss., the proposed terminal. Capital stock, $10,000. M. L. Davis, B. C. Davis, Oak Grove, and Gen. J. W. Whiting, of Mobile, Ala., are incorporators.

PETALUMA & SANTA ROSA RY.—Cal.—Amended articles of incorporation of this company have been filed. The purpose of the company is the construction and operation of a railway and steamboat line from San Francisco to Petaluma, Sebastopol, Forestville and Santa Rosa, the estimated length of the railroad to be 32 miles, while the water route will extend from this city to Petaluma. Capital stock is stated at $1,000,000, of which $40,000 has already been subscribed. John A. McNear, Pres.; Secretary, Thomas Archer; Treasurer, Burke Corbet.

THE ASHLAND & WESTERN RY.—O.—Company has been incorporated at Ashland, O., to build from Ashland to Custaloga, Wayne county. R. A. Wilbur, C. P. Hine, W. S. Hammon and others are incorporators. Capital stock, $10,000.

TOLEDO & POINT PLACE.—O.—Company has been incorporated at Toledo with capital of $10,000. John A. Dunn, O. R. Lifert, A. H. Lang and others are incorporators.

STREET AND ELECTRIC RAILWAYS.

HOLDEN, MASS.—The Selectmen have been petitioned by the Worcester & Holden Street Ry. Co. for authority to build an extension of its line here. E. S. Douglas, of Worcester, is Secy.

WORCESTER, MASS.—The Worcester Consolidated Street Ry. Co. intends extending its line to Tatnuck. F. H. Dewey, City, is Pres.

SCHENECTADY, N. Y.—The Schenectady Ry. Co. will extend its line from Rexford Flats through Crescent, Dunsbach's Ferry to Northside and thence to Troy. C. C. Lewis is Ch. Engr.

ALLENTOWN, PA.—The Common Council has referred the ordinance granting the Allentown & Reading Traction Co. the right to extend its tracks over 40 blocks of city streets to the City Solicitor. Select Council has passed the ordinance on second reading.

JOHNSTOWN, PA.—Nearly all rights of way for the proposed electric railway from Johnstown to Ebensburg have been secured and construction work will soon begin.

RIDGWAY, PA.—The Elk Street Passenger Ry. Co., capital $100,000, has secured a charter to construct an electric railway 17 miles long in Elk County, connecting Ridgway, Whistletown, Johnsonburg and St. Mary's.

PHILADELPHIA, PA.—The Philadelphia Terminal Railroad Co. has applied for a charter to construct a 28-mile line in Chester and Delaware Counties. One line will run from the western terminus of the Market St. elevated railroad to Malvern, Chester County, and the other from the same terminus to Eddystone, Delaware County. The capital of the new company is $280,000. Clarence Wolf, City, is Pres.

RENOVO, PA.—Capitalists of Renovo and North Bend are discussing the advisability of constructing a trolley line from Renovo to North Bend, and there is a strong possibility of the project taking definite shape in the near future. The distance between the two towns is three miles. The plan as outlined is to construct a dam in Young Woman's creek and erect a power house there. The water power in the creek is first class, and electricity for light, heat and power could be supplied to Renovo and North Bend, as well as furnish power for the trolley line. It is likely that action will be taken soon toward organizing a company to construct and operate the line.

UNIONTOWN, PA.—The Webster, Monessen, Bellevernon & Fayette City Street Ry. Co. has been reorganized. The road is to be extended to Fayette City and Webster during the summer. H. D. McCabe is Secy.

FAIRFAX, VA.—The Washington, Alexandria & Fairfax County Electric Ry. Co. will build an extension to this city, also to Manassas and other points.

GULFPORT, MISS.—The Gulfport electric railway is to be extended to the northern suburbs of the city, giving the company about four miles of tracks. The plant will represent an investment of $175,000.

BUCYRUS, O.—The Marion & Tiffin Traction Co. is projecting an electric railway from Marion to Tiffin via Bucyrus. Office, Nedele Bldg., City.

CINCINNATI, O.—The Cincinnati Interurban Co. will spend $150,000 in improving its lines between Cincinnati city limits; $70,000 will be expended on new equipment. S. C. Cooper is Secy.

CLEVELAND, O.—County Commissioners have granted a franchise to the Shaker Lakes & Boulevard Ry. Co. from the city limits to Warrensville Center.

GENEVA, O.—The Geneva Electric Ry. Co. has been organized with Marcus Westerman as President. The company will build a line connecting Geneva with the Lake Shore and work will commence in a short time.

SPRINGFIELD, O.—The Springfield Ry. Co. has asked for a franchise to extend one of its lines to north of the city. J. H. Muller is Gen. Mgr.

TOLEDO, O.—The Toledo & Point Place Ry. Co. has incorporated with $10,000 cap. stock. Company has secured a franchise to build a line from city limits to Point Place. Incorporators are: J. A. Dunn, W. R. Leflet and others.

GRAND RAPIDS, MICH.—The village of Allegan has granted a 50-year franchise to the Grand Rapids & South Haven Electric Railway. Work must be started within six months to hold the franchise.

LA SALLE, ILL.—The Illinois Valley Ry. Co. has been incorporated with $100,000 cap. stock. The railway is to run from Joliet to Princeton through Morris, Marseilles, Ottawa and other points. The incorporators are: H. E. Chubbuck, V. J. Duncan, A. F. Schochand, Chas. E. Hook, of Ottawa, and Frank W. Bedard, of La Salle.

OTTUMWA, IA.—A right of way is being secured for the proposed Chicago, Ottumwa & Western Electric Interurban. The first portion will be built from this city to Eddyville. A. A. McGarry, of Indianola, Ia., is securing the right of way.

MANKATO, MINN.—Thomas F. Deegan and Thomas F. Daby, of Philadelphia, Pa., have offered to build a seven-mile electric railway here if citizens will subscribe $50,000.

ST. JOSEPH, MO.—The St. Joseph Interurban Ry. Co. has incorporated with $100,000 cap. stock. Incorporators are: Samuel F. Moore, James E. Patrick, City, and others.

BOULDER, COLO.—The Denver & Boulder Interurban Ry. Co. has secured all the right of way between Louisville and Bloomfield, and most of the right of way between Louisville and Boulder. It also claims that most of the right of way has been secured between Bloomfield and Denver. At Denver connection is to be made with the Tramway company, at Boulder with the Boulder Electric Light & Power Co., thus insuring entrances into each city. From Boulder out the route will run along Arapahoe Ave. via Washington Lake, which is to be made a summer resort. Then it will follow the road east until it strikes the road going south to Louisville. The power house will probably be located at Louisville. The company expects to push matters ahead as rapidly as possible.

FORT WORTH, TEX.—The City Council passed an ordinance empowering the Northern Texas Traction Co. to at once begin the work of construction on the Summit Ave. and Hill St. line. S. Horn is Ch. Engr.

TEMPLE, TEX.—The Interurban Traction Co. is considering the extension of their line to 1.7 miles to Dunn's Canyon, increasing the capital stock from $250,000 to $300,000.

BEAUMONT, TEX.—The Beaumont, Sour Lake & Port Arthur Traction Co. has amended its charter, authorizing the construction of a line from Batson to Houston.

TACOMA, WASH.—The Puget Sound Electric Ry. Co. made application to the Board of County Commissioners of Pierce County for franchise to construct electric railways and transmit electric power on streets and roads of said county.

PORTLAND, ORE.—Articles of incorporation are to be filed by the Portland, Salem & West Side Ry. Co. The road will be 71 miles long and will be operated by electricity. Est. cost, $1,000,000.

LOS ANGELES, CAL.—The Los Angeles Ry. will take advantage of the 11th St. franchise granted by the Council and will rush construction work on the line soon as the preliminary arrangements can be attended to. The line will be a mile and three-quarters long, and will make a loop connection with the Ninth St. line. G. J. Kuhrts is Ch. Engr.

SAN FRANCISCO, CAL.—The San Francisco Ry. Co. has been incorporated with $1,500,000 cap. stock to construct a street railway from Market St. to Ocean Beach as soon as a franchise can be secured from Board of Supervisors. J. W. Scott, of Oakland, is interested.

AYLMER, ONT.—R. M. Luton, Pres. London, Aylmer & North Shore Electric Ry. Co., Whiddington Bldg., Grand Rapids, Mich., has secured the capital to finish the road, which will be 45 miles long, with power station and repair shops at Aylmer.

PETERBORO, ONT.—The application of Peterboro Radial Ry. Co. has been granted by the Railway Commission empowering them to cross the Grand Trunk and the Canadian Pacific tracks in Peterboro.

LIGHT, HEAT AND POWER PLANTS.

BENNINGTON, VT.—The Bennington Gas Co., capital of $100,000, of which $75,000 is paid in, has been incorporated by Jas. D. Sherrill, Jas. E. Flood, Brodie G. Higley, of Sandy Hill, N. Y.; E. K. Dunbar, of Boston, and Warren E. Putnam, City.

BOSTON, MASS.—The Board of Gas and Electric Light Commissioners has authorized the Marlboro-Hudson Gas Co. to issue 400 shares of additional capital stock, the proceeds of which are to be used in the enlargement of the company's plant.

McKEESPORT, PA.—Finance Committee of the Council will favorably report the issuance of $350,000 bonds. An electric light plant may be included in the items. Bond election will be held on Dec. 20.

HARRISBURG, PA.—United Gas Improvement Co. will make improvements to plant, including new machinery, buildings and extensions. Cost, $75,000.

PHILADELPHIA, PA.—The Philadelphia Rapid Transit Co. has obtained a permit to build a $12,000 power house on Wyoming Ave., opposite Second St. The Reinforced Cement Construction Co. has the contract.

NORFOLK, VA.—R. B. Fentress, Pres. of the Norfolk Cold Storage & Ice Co., has again brought the subject of his application for a franchise before Council.

MOUNDSVILLE, W. VA.—Bids are asked until July 15 by the Moundsville Electrical Co. for the construction of new plant. Bids for the engine, dynamo and other machinery will be opened at the same time. The building is to be of brick, 60 × 100 ft.

SPENCER, N. C.—The Yadkin River Power Co., City, has been organized with a capital of $10,000, and will apply for a charter. E. E. Mandenhall, of High Point, Pres.; J. M. Brown, City, Secy.; and G. W. Elliott and A. W. Lindsay, of Randleman, directors. The object of the new company is the operation of an automobile line between Chestnut Hill, Salisbury and Spencer to a point on the Yadkin River.

WASHINGTON, N. C.—Bids are asked until July 28 for erection and installing complete an electric light plant. Two 178-HP. medium speed engines, two 120-KW. A. C. generators, 75 light series arc system and pole line will be needed. E. T. Stewart, Chn.; J. L. Ludlow, Engr., Winston-Salem, N. C. (Advertised, Engineering News.)

BELTON, S. C.—Belton Water Power Co. has been incorporated by R. A. Lewis, W. K. Stringer, J. T. Rice and others.

NEWBERRY, S. C.—Council has adopted a resolution authorizing the mayor to execute notes amounting to $4,700 for the proposed electric lighting plant.

CARROLLTON, GA.—O. Perry Sarle, Consulting Engr., of Atlanta, is negotiating with the municipal authorities for the preliminary survey for the proposed water-works, sewerage and electric lighting plant, lately mentioned. Bonds for $45,000 were voted for the plants.

JASPER, ALA.—Jasper Water, Light & Power Co. has been incorporated with capital of $50,000, with $30,000 paid in. Incorporators: J. M. Cranford, L. W. Lollar, E. M. Cranford, D. K. Carter and others. Water, gas and electricity are to be furnished to the town.

CHATTANOOGA, TENN.—C. W. Holbrook, Secy. Chamber of Commerce, informs us that engineers probably will report upon proposed power dam in Tennessee River, previously reported, within 60 days.

GLENVILLE, O.—Bids for lighting the streets with electric light will be received by M. W. Miles, Secy. Board of Public Service, until July 20.

ROCKY RIVER, O.—The Rocky River Water, Light & Power Co., has been incorporated by C. P. Corlett, E. H. Richards, Robt. Fisher and others, with capital stock of $75,000.

BICKNELL, IND.—J. H. Barr & Co. have secured site for proposed electric light and power plant to be erected by them.

ELWOOD, IND.—Pittsburg Gas Co. has been incorporated with a capital stock of $10,000. Directors are connected with the Citizens' Light & Heat Co. of this city.

PLAINWELL, MICH.—An electric power house, costing about $15,000, will be constructed by the J. F. Esley Milling Co. Enough electricity to furnish 300 or 400 HP. will be generated. Plant will be equipped with new machinery.

CORUNNA, MICH.—The Shiawassee Light & Power Co. will rebuild its dam, using about 800 cu. yds. of concrete construction, we are informed by W. G. Fargo, Consult. Engr., Jackson. No formal date of letting contracts has been made.

CHICAGO, ILL.—Wm. Artingstall, C. E., writes us that "bids are asked until Aug. 31 for turbines, governors, etc., for the partial development of the Lockport power of the sanitary and ship canal. About 25,000 HP. will be developed at present. Plans and specifications are on file at Engineering Dept., Sanitary Dist., Security Bldg., Chicago."

CHICAGO, ILL.—Bids are asked until July 25 for installing new electrical equipment in the Cook County court house in this city. Wm. McLaren, Supt. Pub. Service.

GIBSON CITY, ILL.—L. J. Hilland, S. J. Lefevre and A. L. Phillips are said to have incorporated the Gibson Electric Light & Power Co. with a capital stock of $30,000 to operate a heat, light and power plant.

DES MOINES, IA.—About $100,000 will be expended by the Iowa Light & Heating Co. in extensive additions to its plant in furnishing light and heat to the residence districts of North and West Des Moines, it is reported.

BERLIN, WIS.—Henry Moorman, Cy. Clk., writes us that no bids were received for lighting streets. Council has taken no further steps.

GRAND FORKS, N. D.—The capacity of the electric light plant of the Grand Forks Gas & Electric Co. will be doubled. A new fireproof building, 42 × 59 ft., will be erected.

MISSOULA, MONT.—Joseph Simon, John M. Gearin and F. R. Olin have incorporated, under the laws of Oregon, the Missoula Light & Water Co. The company will conduct and operate water and light plants, acquire real estate, etc. Company is incorporated for $400,000.

LEBANON, MO.—O. G. Bannrly, W. P. Simpson, C. W. Rubey, W. I. Diffenderffer and others have incorporated the Lebanon Electric & Power Co., with $2,000 capital.

HANDLEY, TEX.—Northern Texas Traction Co. will expend $100,000 in improvements, including the enlargement of power house.

EL PASO, TEX.—It is reported that the El Paso Brewing Co. will construct water-works and electric plant in East El Paso.

Wilhelm Griesser, care of Suburb Gas, Light, Heat & Power Co., El Paso, wants prices on electrical machinery.

AUSTIN, TEX.—The Taylor-Moore Construction Co., of Hillsboro, has been chartered with capital stock of $50,000. Incorporators, James T. Taylor, J. W. Moore, J. W. Gilliam.

VANCOUVER BARRACKS, WASH.—Contracts for electric lighting of the post have been let, as follows: Western Electric Works, wiring of certain buildings, furnishing and installing watt meters in buildings, $11,921; Northwestern Electric Engineering Co., construction of primary, secondary service and arc light lines; furnishing and installing cut-outs, service switches and cut-outs, and street-lamp hangers, and hanging and installing and connecting transformers and arc hangers, $6,433; General Electric Co., furnishing and delivering of all transformers, watt meters and arc lamps called for in the schedule, $3,917; Vancouver Electric Light & Power Co., furnishing all current delivery over primary meter or meters at $.06 per kilowatt hour for interior illumination. For all currents over the arc lines at the rate of $85 per year for each arc lamp. The United States to have privilege of annual renewal at the same rate for ten years. The work will be commenced as soon as practicable.

PRAIRIE CITY, ORE.—The Middle Fork Electric Power Co., R. C. Reese, Pres., will build an electric power plant costing $40,000, on the Middle Fork. The company will supply light and power to all the mines in the district.

SALEM, ORE.—Bids are asked until Aug. 1 for lighting city streets by arc electric system. L. W. Acheson, Chn.

MOAT, UTAH.—J. N. Corbin writes us that he has assigned his 25-year electric franchise to the La Sal Mountain Telephone & Electric Co. Telephone line from Moat to Thompson and from Moat to Castleton is controlled by company. Electric plant here is under consideration.

ELECTRA, CAL.—It is reported that the California Gas & Electric Corporation contemplates making extensive improvements and additions to the electric plant here.

SAN FRANCISCO, CAL.—The Humboldt County Water & Power Co. has been incorporated by Congressman Gillett, N. H. Hine, F. B. Hink and others, with capital of $1,000,000. The new company will take water and power from Mad River. The plans include a high-pressure reservoir between the river and Eureka of sufficient capacity to supply Eureka with sufficient head to afford great power. The company proposes to install at once a power plant to furnish the immediate market with power. Civil Engineer B. von Homeyer is interested.

OAKLAND, CAL.—The Century Electric Co., of Alameda County, has been incorporated by F. M. Greenwood, C. M. Wood, E. F. Weihe, J. P. Maxwell and I. O. H. Hartley. Capital, $50,000.

SAN FRANCISCO, CAL.—Supervisors awarded contract for lighting streets and public buildings to the San Francisco Gas & Electric Co., at $320,000, the amount appropriated for the purpose in the next municipal budget.

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SANTA CRUZ, CAL.—A project is on foot to [illegible] the San Lorenzo River for the purpose of furnishing power for the Co-operative Light Co. The plan is to build a dam. The power houses are to be erected at Ancona Flat and the water will be carried in a flume from the dam to the power houses.

BOISE, IDAHO.—William D. Bean and A. J. N[illegible]cker, of New York, N. Y.; B. F. Olden and L. J. W[illegible]er, of Boise, and others have incorporated the Crane Falls Power & Transportation Co. Company will construct a power plant in Owyhee County at Crane Falls for generation of electric power for the operation of the company's several plants.

WHITE BIRD, IDAHO.—The electric light plant will be enlarged.

LEWISTON, IDAHO.—W. A. Aldrich, of Spokane, Wash., and associates have purchased a site for gas plant. They propose to erect a plant to cost $40,000; and soon as the building and reduction works have been erected the company formed will lay the mains in the business section of the city.

BRIDGES.

MANCHESTER, N. H.—The Street and Park Commissioners received the following bids June 29 for the proposed new steel bridge over the lower canal on Granite St.: Berlin Construction Co., $9,200; New England Structural Co., $9,148; Boston Bridge Works, $8,900; Eastern Bridge & Structural Co., $8,695; United Construction Co., $8,575. The United Const. Co. will probably be awarded the contract. Frank K. Ramsey is Clk. of Bd.

BOSTON, MASS.—Bids asked by Henry V. Mackey, Acting Supt. of Sts., City Hall, until July 21 for superstructure of Harvard St. bridge, Dorchester District.

BRIDGEPORT, CONN.—A new bridge will probably be erected over Ash Creek, between Bridgeport and Fairfield.

MOUNT MORRIS, N. Y.—The contract for building the Tuscarora iron bridge and abutments has been awarded to the Weedsport Construction Co. for $3,315.

NEWARK, N. J.—The F. M. Stillman Co., of Jersey City, has been awarded the contract for construction of a steel trestle and viaduct from the plant of Christian Feigenspan Co., on Freeman St., to the tracks of the Central Railroad. The plans were drawn at the office of Hooper & Co., Engrs. Cost, about $40,000.

BURLINGTON, N. J.—The contract for the building of a new bridge over the Assiscunk Creek has been awarded to E. A. K. Buzby, of Trenton, for $3,450.

PASSAIC, N. J.—The contract for the new county bridge to be placed at the foot of Gregory and Main Aves. has been practically awarded to the Frank R. Long Co. by the joint committee on county bridges of the Bergen and Passaic County Freeholders. The Long Co.'s bid was $58,700, the lowest of seven.

WESTFIELD, N. J.—Wm. Farrier, of Newmarket, has the contract to build the new bridge on Elm St. W. T. Kirk will furnish the iron work.

FAYETTE CITY, PA.—McKelvy & Hine, Pittsburg, Pa., were awarded contract for erection of a stone bridge across Downer Creek.

HARRISBURG, PA.—Bids for the erection of eight bridges by the state, to take the place of bridges destroyed by high water last spring, were opened by the Board Public Buildings and Grounds. The following were the lowest bids, all from Penn Bridge Co., Beaver Falls: Lackawaxen River, Farnham, $12,221; Chenango River, Sharpsville, $23,680; Lackawaxen River, Blakely, $11,999; Lackawaxen River, Acid Factory, $5,122; Beaver River, Moravia, $62,875; Lackawaxen River, Goodman, $6,295. The King Bridge Co., of Cleveland, was lowest bidder for a bridge over the Susquehanna at Danville, $134,900, and the Pennsylvania Steel Co. was the lowest bidder for a bridge over the Susquehanna at Ulsty, $140,000.

FRANKLIN, PA.—Bids are asked by County Commissioners until July 15 for constructing a 135-ft. steel superstructure over Sugar Creek, in Jackson Township. E. K. Smiley, Clk.

NEWTOWN, PA.—The Howe truss bridge spanning Neshaminy Creek, on the Newtown branch of the Reading system, was destroyed by fire.

PITTSBURG, PA.—Contract for erection of the Wilmot St. bridge will be awarded Aug. 14. Approximate cost, $150,000.

READING, PA.—The oldest bridge in Berks County, at Douglassville, has been condemned by the County Commissioners. It will be replaced by a new one.

YARDLEY, PA.—A company has been formed, with B. F. Livezey, City, as president, to build an iron bridge over the Delaware at this place.

ELKTON, MD.—The Cecil County Commissioners have appropriated $20,000 for repairs to public roads and bridges.

HAVRE DE GRACE, MD.—The Pennsylvania Railroad has awarded the contract for the steel superstructure for the new double-track bridge across the Susquehanna River at Havre de Grace to the American Bridge Co., 100 Broadway, New York, and the Pennsylvania Steel Co., Girard Bldg., Philadelphia, Pa. Each corporation will construct and erect one-half of the superstructure. The bridge will contain 17 spans and a draw.

WASHINGTON, D. C.—Fred. A. Perley, Acting Engr. Bridges, 59 District Bldg., informs us that money has been appropriated for constructing bridge across Anacostia River at 11th St., S. E. Total cost not to exceed $250,000. No plans have been made as yet.

SHREVEPORT, LA.—Bids asked until July 18 for construction of a brick or concrete culvert under Pierre Ave. Plans and specifications on file in office of City Engineer. C. G. Rives, Comptroller.

CHATTANOOGA, TENN.—Through an arrangement recently made between Hamilton County and the railroads a viaduct will be erected over the tracks at McCallie Ave., in the southern suburbs of Chattanooga at a cost of $58,000. Through the agreement entered into the county will pay $17,000; the Southern Railway $17,000, Chattanooga Street Ry. Co. $17,000 and Nashville, Chattanooga & St. Louis Railway $7,000.

CLEVELAND, O.—The Erie has about completed plans for construction of its new bridge over the Big Four tracks at Scranton Ave. The contract will soon be let. The bridge will be slightly over 100 ft. in length and will be a double-track structure.

CLEVELAND, O.—The following bids were received June 30 for construction of Jefferson St. bascule bridge over Cuyahoga River; Wm. J. Carter, Ch. Engr.: Substructure, J. B. Frauenthal, $48,526; J. Conners & Co.,

$[illegible]02; Williams Bros., $55,605; C. H. Fath & Son, $50,-[illegible]; M. F. Conden, $61,626; E. M. Graves, $66,290; Rid-[illegible] Huesten Co., $67,850; Geo. Peter Co., $68,620; Savage [illegible] Co., $78,475; Geo. Garrett, $92,415; O. D. Tuttle, $[illegible]28. Superstructure, Interstate Engineering Co., $80,-[illegible] McClintic-Marshall Contr. Co., $82,901; J. H. Web-[illegible] $90,163; King Bridge Co., $94,106; Masallion Bridge [illegible] $98,590; Huesten & Cleveland, $103,722; Brown [illegible] Co., $102,743.

[illegible]MA, O.—Bids asked by Geo. Feltz, Audr., Allen [illegible]nty, until July 27 for construction of a high truss [illegible] bridge over the Auglaize River, to consist of a [illegible]gle span of 140 ft., with a roadway of 14 ft., with [illegible]er oak, concrete or creosote block floor. Plans and [illegible]ecifications on file in office of Auditor. J. C. Cronley, [illegible]gr.

SPRINGFIELD, O.—The contract for erecting the [illegible]ntle Ave. bridge was awarded to Ryan & Russell for $[illegible]98, and for additional concrete $7 per yd.

MARION, IND.—Bids are asked by Harry Goldthwaite, Audr. Grant County, until Aug. 6 for constructing the new McFeeley steel bridge. The structure will be in two spans of 100 ft. each. Est. cost, $25,000.

TERRE HAUTE, IND.—The manager of Forest Park will soon erect two suspension bridges, one across the creek and the other across the big hollow.

INDIANAPOLIS, IND.—City Engineer Jeup recommends to the City Council finance committee the appropriation of $56,000 for the repair and improvement of Pogues run and Pleasant run bridges, which were damaged by high water.

INDIANAPOLIS, IND.—Superintendent of Streets has recommended to the Board Public Works that a canal bridge be built at 13th St. The matter was referred to the City Engineer.

Plans for new bridges over White River at Morris St. and Michigan St. will soon be ready for inspection by the Commercial Club Bridge and Stream Commission, according to information given out at office of Board of County Commissioners. These are the first of the four river bridges to be built by the county, for which the County Council has voted a bond issue of $663,000. The first instalment of these bonds, amounting to $170,000, will be sold on July 26. Bids will soon be asked.

INDIANAPOLIS, IND.—City Engineer Jeup has completed plans and specifications for a new bridge over Fall Creek at Northwestern Ave. The Board Public Works will now advertise for bids.

INDIANAPOLIS, IND.—City Engineer Jeup will draw plans for the rebuilding of the middle pier under the Capitol Ave. bridge over Fall Creek, and they will be presented at the next meeting of the Board Public Works so that bids can be advertised for.

MARION, IND.—Bids are asked by Harry Goldthwaite, Audr. Grant County, until July 23 for constructing a concrete or steel bridge over Big Walnut Creek.

Bids asked for construction of five concrete arches. Plans and specifications on file in Auditor's office.

NEWCASTLE, IND.—Bids asked by Henry County Commissioners until July 23 for construction of substructure of five steel bridges. Plans and specifications on file in office of County Auditor.

VERSAILLES, IND.—Bids are asked by Nicholas Volz, Audr. Ripley County, until Aug. 2 for construction of abutments for a wagon bridge across Pipe Creek in Adams Township. Plans and specifications on file in Auditor's office.

MANISTEE, MICH.—The bridge crossing Manistee River at Maple St. has been declared unsafe.

PEKIN, ILL.—Bids are asked until July 18 for construction of an iron bridge. S. S. Smith, Chn. Rd. and Bridge Com.

ROCK ISLAND, ILL.—Wallace Treichler, Cy. Engr., writes us that the city will build a steel highway bridge over Rock River, of two spans, 158 ft. in length each.

PEKIN, ILL.—Ed. Cooney, of Tremont, was awarded the contract by the bridge committee of the Board of Supervisors for the erection of a bridge over Sugar Creek, in Little Mackinaw Township. The price is $1,300. The bridge is to be a 45-ft. iron span with concrete abutments. A concrete arch will be erected over Cole's creek in Tazewell County at a cost of $1,500.

GREEN BAY, WIS.—Bids are asked by Commissioner on Streets and Bridges of Common Council until July 25 for constructing a steel draw-bridge with piers and abutments over East River on Webster Ave. W. L. Kerr, Cy. Clk.

OCONOMOWOC, WIS.—Wm. Powrie, County Surveyor, has filed plans and specifications with the Common Council for a new bridge to be erected over the Oconomowoc River.

CLINTON, IA.—A tornado struck the high bridge across the Mississippi, blowing three spans of iron structure into the river, leaving a gap 250 ft.

DES MOINES, IA.—Bids are asked by Board Public Works until July 30 for constructing a 16-ft. concrete culvert.

OGALALLA, NEB.—Bids are asked by Orin Reed, County Clk., until July 20 for constructing two wooden pile bridges, about 2,000 ft. long, across the North Platte River.

FARGO, N. DAK.—Bids asked by Arthur G. Lewis, Audr. Cass County, until July 15 for construction of 15 bridges. Plans and specifications on file in Auditor's office.

KANSAS CITY, MO.—The Board Public Works has decided to place the letting of the contract for the repairs to the 18th St. bridge over the Belt Line in the hands of the Metropolitan Street Ry. Co. The work will cost $6,000, of which the city will pay one-third.

KANSAS CITY, MO.—The Belt Line bridge back of the Schwarzschild & Sulzberger plant was destroyed by flood.

TALOGA, OKLA.—The contract for the half-hip low-truss steel bridge across the South Canadian River has been awarded to the Alexander Bridge Co., of Kansas City for $18,000, and work is to commence at once.

CANON CITY, COLO.—The Fremont County Commissioners have practically decided to build a bridge at lower end of Fruitmere. Cost, $12,000.

ALBANY, ORE.—Marion County Court has agreed to build the bridges needed in the proposed road to the Santiam mining district. There are ten bridges required.

PORTLAND, ORE.—Following bids were received by Thos. C. Devlin, Cy. Audr., June 24, for constructing a steel bridge on Front St.: Pacific Construction Co., Everett, Wash., $33,121; Pacific Construction Co., City, $38,-315; J. B. C. Lockwood, City, $60,985; Puget Sound Bridge & Dredging Co., Seattle, Wash., $63,863; Minneapolis Steel & Machine Co., $58,625; Smyth & Howard Co., City, $70,-250; Robt. Wakefield, City, $58,776 and $62,959; J. B. C. Lockwood, $64,964. City Engineer's estimate, $55,450.

SAN MATEO, CAL.—The City Engineer was directed by Board of Trustees to draw plans and specifications for a frame bridge over creek at Third Ave. and H St.

CONCORD, CAL.—Bids are asked by J. E. Rodgers, County Clk., until July 18 for construction of a bridge across Walnut Creek.

BENSON, ARIZ.—The citizens of St. David have appointed P. H. Lofgreen, E. H. Tilton and H. C. Kimball to meet with Board of Supervisors with reference to construction of a bridge across the San Pedro.

BRIGHAM CITY, UTAH.—Bids are asked by Jos. Jensen, County Clk., until July 18 for construction of several wooden bridges in Box Elder County. Plans and specifications on file in Clerk's office.

BUILDINGS.

PORTSMOUTH, N. H.—O'Brien & Hoolihan Contracting Co., 1722 Park St., Syracuse, N. Y., have the contract for construction of a steel plant building at the Portsmouth Navy Yard, at $113,344; also the contract for building a machine shop, at $61,180.

BATAVIA, N. Y.—Bids are asked by F. Park Lewis, M. D., Pres. Bd. of Trustees, New York State School for the Blind, until July 25 for steam apparatus, laundry equipment, conduits, steam piping and electric wiring for school. Plans and specifications on file in office of G. L. Heins, State Arch., Albany.

BEDFORD, N. Y.—Bids are asked for construction, heating, plumbing, electric wiring and feeders; and also work shop and addition to engine room, coal pockets and driveway, at the New York State Reformatory for Women, until July 25 by the Hon. James Wood, President of the Board of Managers, at the New York State Reformatory for Women. Drawings and specifications may be consulted and blank forms of proposal obtained at the above institution or by application to G. L. Heins, State Architect, at Albany.

BROOKLYN (MANHATTAN BEACH STATION), N. Y.—A number of cottages that would cost $2,000,000 is being planned by the Manhattan Beach Hotel and Land Co. It is proposed to establish the settlement on the land just east of the Oriental Hotel at Manhattan Beach.

ITHACA, N. Y.—The contract for building the Goldwin-Smith and Rockefeller buildings on the Cornell campus has been awarded to Pulford & Dempsey, of Elmira, at a cost of $160,000.

ROCHESTER, N. Y.—The Board of Education awarded the contract for plumbing, heating and ventilating of West High School building to Richard T. Ford, at $44,500.

NEW YORK, N. Y.—Plans have been filed by Neville & Bagge, 217 West 125th St., for a 5-story brick flat, 50× 62 ft., for J. F. Lennon, 626 Columbus Ave. To be erected on 152d St., west of St. Nicholas Ave. Cost, $40,000.

By same architects, for a 5-story brick flat, 50 × 88 ft., on Amsterdam Ave., north of 139th St., for the Bingham Plumbing & Contracting Co., 2415 Broadway. Cost, $50,000.

By same architects, for a 5-story brick flat, 50 × 87 ft., on 159th St., west of Amsterdam Ave., for T. Ferguson, 217 West 125th St. Cost, $50,000.

By Eidlitz & McKenzie, Archs., 1123 Broadway, for a 6-story brick factory, 50 × 91 ft., at 503-505 West 24th St., for Mitchell Vance Co., 24th St. and Tenth Ave. Cost, $50,000.

By Neville & Bagge, for two 5-story brick tenements, 40 × 91 ft., on Boston Road, north of Union Ave., for Sauer, Gross & Herbener, 45 West 95th St. Cost, $60,000.

NEW YORK, N. Y.—The Northeastern Construction Co., 1286 Broadway, has been awarded the contract for officers' quarters at Governor's Island. Cost, $25,000.

NEW YORK, N. Y.—Bids are asked by Francis J. Lantry, Comr. of Correction, 148 East 20th St., until July 23 for repairs, alterations and additions to steam plant and extension to workhouse, Blackwell's Island.

NEW YORK, N. Y.—Bids are asked by Department of Health, 55th St. and Sixth Ave., until July 20 for masonry work, plumbing, steam heating, etc., at the boiler house, disinfecting and laboratory building, at the Kingston Ave. Hospital, Kingston Ave. and Fennimore St., Borough of Brooklyn.

Bids are asked by Department of Education, Park Ave. and 59th St., until July 18 for alterations and additions to several schools.

Bids are asked by John W. Brannan, Pres. Bd. of Trustees, Bellevue and Allied Hospitals, until July 27 for all labor and materials required for the excavation, masonry, steel and iron, carpentry, electric, heating and ventilating, plumbing and all other work for construction of a new hospital in the Borough of the Bronx. Blank forms may be obtained and plans and drawings may be seen at the office of the Auditor and Contract Clerk, 419 East 26th St.

Milliken Bros., 11 Broadway, have the general contract to build the 11-story store and loft building at William and Frankfort Sts. for J. W. & H. V. D. Black, of 95 William St. Buchman & Fox, 11 East 59th St., the architects, estimate the cost at $150,000.

NEW BRIGHTON, N. Y.—Bids are asked by Geo. Cromwell, Pres. Boro. of Richmond, until July 19 for furnishing all the labor and materials necessary for the structural iron and steel work required in the erection and completion of a jail at Richmond, as shown on plans on file in the office of the president.

Bids are also asked until July 19 for furnishing all the labor and materials required for the installation of the heating and power equipment in the Richmond Borough Hall, at Jay St. and South St. and Stuyvesant Place, St. George.

ATLANTIC CITY, N. J.—It is reported that an ordinance has been passed approving issuance of $900,000 bonds for erecting and improving schools here.

ORANGE, N. J.—The Orange Board of School Estimate has taken steps toward the erection of a new public school at Cleveland and Main Sts. It will be recommended that bonds for $125,000 be issued to provide for the school. Of this amount $79,000 is for the building and the balance for the lot.

PLAINFIELD, N. J.—Bids were received for construction of the proposed high schoo, building, including the cost of the grounds and the architect's fees. All bids were rejected by the Local Board Education as being in excess of the $125,000 appropriation. Herbert D. Hale, of New York, will revise the plans for the structure in order that it may be erected for a sum within the stated appropriation.

PHILADELPHIA, PA.—Doyle & Doak, Archs., 1509 Sansom St., have the contract for a church, at Broad and Venango Sts., for St. Paul's Reformed Episcopal congregation. One story, stone, slate roof, steam heat, tile and marble work, gas and electric fixtures and pews. Cost, $100,000.

ALTOONA, PA.—Bids received for new Insane Asylum were considered excessive. The lowest bid was $147,680, about double the amount the commissioners will expend on the building alone. New bids will probably be asked for.

UNIONTOWN, PA.—R. N. Sample and Ewing Marshall, City, have had plans prepared for new modern hotel. Cost, $70,000.

PITTSBURG, PA.—Contract for erection of Carnegie Library addition was awarded to William Miller & Sons Co., Frick Building, at $2,591,993. Contract does not cover the heating, lighting, ventilation, power plant or decorating, which will be awarded later. Construction will be commenced at once. Alden & Harlow, City, are Archs.

High School Committee of Central Board of Education will ask board to appropriate $10,000 for completion of heating apparatus in Bedford Ave. High School, and $3,000 for sanitation in the South Side Building.

Bids will be received by R. J. Cunningham, County Controller, until July 23 for constructing additions and alterations to Allegheny County Jail. F. J. Osterling, Times Building, City, is Arch.

PHILADELPHIA, PA.—Melody & Keating were granted a permit for a 4-story and basement wing to St. Agnes's Hospital, at Broad and McKean Sts. The building will be 30 × 44 ft., with an addition 56 × 112 ft. Cost, $200,000. Plans are by E. F. Durang, 1200 Chestnut St.

DELAWARE CITY, DEL.—Bids are asked by Capt. Louis F. Garrard, Jr., Q.-M., U. S. A., in charge of construction, Delaware City, until July 19 for construction, plumbing, heating and electric wiring of one 12-bed army hospital at Fort Mott, N. J., the same being a re-advertisement of the above work several changes having been made in specifications in order to reduce cost of building.

BALTIMORE, MD.—St. Joseph's Hospital, Caroline St., has awarded contract to Henry L. Maas, 906 Aisquith St., for construction of addition to hospital. Baldwin & Pennington, Archs., 311 North Charles St. Three stories, 52 × 116 ft., with 1-story wing, 22 × 82 ft.; brick, with stone trimmings; concrete foundation; steel beams. Cost, $45,000.

The Courthouse Commission has commissioned Wyatt & Nolting, Archs., to make plans for the repair of the courthouse and to alter the St. Paul St. entrance. The contract price is 2½% on the cost of repair work, and 5% of the cost of changes. The $150,000 appropriated by the city council may not be enough to cover the expenses, it is said.

CHARLESTON, S. C.—The Victor Building and Loan Co. has been chartered with $150,000 capital. The officers are: M. F. Kennedy, Pres.; R. E. Newton, Vice-Pres.; W. M. Jacobs, Secy.

ATLANTA, GA.—The contract for the erection of the First Baptist Church has been awarded to Donaldson & Pearson, contractors, City. The building will cost $90,000.

HOUSTON, VA.—Bids are asked by Thomas Easley, Clk. Bd. of Supervisors of Halifax County, until July 25 (change of date), for remodeling the County Court House. B. F. Smith Fireproof Construction Co., 503 Pope Bldg., Washington, D. C., is Arch.

WHEELING, W. VA.—Bids are reported asked by Giesey & Faris, Masonic Temple, until July 16 for construction of 12-story office building for Henry Schmulbach. Twelve stories: brick and stone; steel frame, corridors and offices finished in marble mosaics and hardwoods; electric wiring in conduits of cement or steel; complete hot and cold water systems. Cost, $350,000.

COLUMBUS, MISS.—Bids are asked until July 20 for plumbing and heating New Music Hall and heating Tom Franklin Hospital, Industrial Institute and College. T. B. Franklin, Chn. Ex. Com.

MEMPHIS, TENN.—D. H. Burnham & Co., Archs., Railway Ex. Bldg., Chicago, Ill., have completed plans and will receive bids for a bank and office building to be erected for Memphis Trust & Savings Bank. 16 stories, 50 × 190 ft., fireproof construction, steam heat, combination fixtures, nickel plumbing. Cost, $800,000. Previously reported.

NEW ORLEANS, LA.—D. H. Burnham & Co., Archs., Chicago, Ill., are preparing plans for a passenger station to be erected for the New Orleans Terminal Co. Steel, stone and brick. Cost, $300,000.

MOBILE, ALA.—State Railroad Commission has approved plans for proposed union station. J. S. B. Thompson, Gen. Agt. of the Southern Railway Co., is interested. Building will cost $150,000.

BATTLECREEK, MICH.—Albert Kahn, 1117 Union Trust Bldg., Detroit, Arch., is preparing plans and specifications for the Government building. They will be ready for contractors to figure on early next month. Cost, $85,000.

WAUSEON, O.—Bids are asked by J. F. Outcalt, Clk. Bd. of Education, until July 22, for installing and equipping the high school building with modern heating and ventilating apparatus. Heating to be either hot air with fan blast or steam heating method. J. H. Johnson, Pres.

MANSFIELD, O.—Bids are asked by W. C. Mowry, Clk. Bd. of Education, until July 19 for the construction and erection of a mechanical steam heating and ventilating plant, to be installed in the Bowman St. school building. Vernon Redding, Arch.

TIFFIN, O.—St. Mary's Roman Catholic congregation will erect a $45,000 church at Miama and Franklin Sts. W. P. Ginther, Arch., Akron, O.

WELLSTON, O.—Bids are asked by James O. Dorsey, Clk., until July 16 for remodeling and repairing city building.

RICHMOND, IND.—The Board of Trustees of the Reid Memorial Hospital Association has let the contract for the building of hospital to Louck & Hill, City, at $48,230.

HAMMOND, IND.—Bids are asked by J. T. Hutton, Arch., 306 Hammond Building, or Dr. W. F. Howat, Pres. Library Trustees, until July 25 for erecting the Carnegie Library Building, complete, except heating.

CHICAGO, ILL.—Jacob Litt, lessee of McVicker's theater, Madison St., will make extensive alterations in

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

that theater at once to conform to the requirements of the new ordinance, it is reported. The stage will be rebuilt, the seating arrangement, the exits and entrances changed, and second balcony will be rebuilt. Estimated cost, about $100,000.

Holabird & Roche, Monadnock Block, have plans for a mercantile building to be erected at Jackson Boulevard and Market St. for Thomas H. and Rivers McNeill. Ten stories, about 150 × 150 ft., of fireproof construction. Cost, $300,000.

Holabird & Roche are preparing plans for a 14-story mercantile building to be erected at 138 to 144 State St., for Louis Eckstein and A. R. Stumer. Cost, $800,000. Leases on the property will not expire until next May, 1905, when work probably will be started.

Bids are asked by Board of Education until July 15 for metal and gravel roofs and painting at sundry schools.

Chapin & Gore will raze their building at 20 Adams St., and will erect a store and loft building, eight stories high, of mill construction, 80 × 81 ft. Plans have been drawn by Richard E. Schmidt.

Plans have been prepared and work will commence soon upon the clubhouse that Stanley McCormick will erect for the employes of the International Harvester Co., at Blue Island and Oakley Aves. The building is to be three stories, 177 × 63 ft., brick and stone; bowling alleys, cafe and auditorium. Mr. McCormick has donated $75,000 for the erection of this building.

PEORIA, ILL.—A permit for the construction of the Schipper & Block building to be erected at Fulton and Adams Sts., has been issued. Cost, $200,000. Seven stories, 72 × 171 ft., a basement and sub-basement, steel construction with brick and terra cotta covering, fireproof.

EMMETSBURG, IA.—Bids are asked until July 25 for erecting a theater, store and office building. M. C. Grier, Secy.; Omeyer & Thori, Archs., St. Paul, Minn.

DAVENPORT, IA.—Plans have been prepared by Clausen & Burrows, 205 West Third St., Archs., for a 3-story brick and stone high school building, 201 × 200 ft. Bids will be received after August 2 for the entire building, except heating and plumbing. Cost, $181,300.

LITTLEFALLS, MINN.—Bids are asked by L. E. Richard, of library board, until July 15 for the erection of a Carnegie library building. F. D. Orff, Minneapolis, Minn., is Arch. A. R. Davidson, Pres. Bd.

CARROLL, IA.—Bids are asked by the board of library trustees until July 18 for the erection of a library building. Mrs. Wm. L. Culbertson, Secy. Thos. R. Kimball, Arch., Omaha, Neb.

COUNCIL BLUFFS, IA.—The contract for the construction of new buildings at the Iowa School for the Deaf has been awarded to Henry W. Schlueter, of Chicago, at $220,022. The contract does not include the steam heating plant and plumbing, but includes the electric wiring. Estimated cost of heating and plumbing, about $50,000.

RACINE, WIS.—A heating and electric plant, together with other improvements, will be installed at Racine College. Cost, $60,000. Arthur Guilbert, Arch.

WAUSAU, WIS.—Bids are asked until August 18 for construction (including heating apparatus, electric wiring and conduits) of post-office building. James Knox Taylor, Supervising Arch., Treasury Dept., Washington, D. C.

ST. LOUIS, MO.—Bids were received by Wm. B. Ittner, Comr. of School Buildings, until July 12 for the 3-story Clay school building, 121 × 246 ft., for the Board of Education. Fireproof, brick and cut stone, composition roof, fire escapes, combination light fixtures, nickel plumbing, etc. Cost, $150,000.

SPRINGFIELD, MO.—Bids are asked by J. S. Dorsey, Chn. Building Committee, 817 Washington Ave., until July 18 for the erection of a brick church for the Washington Ave. congregation.

CRIPPLECREEK, COLO.—Bids are asked by the Board of County Commissioners of Teller County until July 18 for the construction of a 2-story courthouse. A. J. Smith, 117 East Kiowa St., Colorado Springs, is Arch. F. P. Mannix, County Clk.

BREMERTON, WASH.—Bids were received July 9 by the Bureau of Yards and Docks, Navy Dept., for plate metal shop for construction and repair, at Navy Yard, Puget Sound. Walter Bros. & Co., City, were lowest bidders at $45,239.

TACOMA, WASH.—Fred. H. Smith, Fidelity Bldg., Arch., Bd. of Education, is preparing plans for high school building, for which $200,000 of bonds were voted last April. G. F. Whitty, Secy.

LOS ANGELES, CAL.—A site has been selected for the Tivoli Opera House at Ninth and Spring Sts. It will be a 3-story brick building, from designs of A. L. Haley, costing $100,000. H. C. Wyatt is Pres. of the stock company.

SACRAMENTO, CAL.—Special election will be held on July 19, when proposition to issue $200,000 High School building bonds will be voted upon. M. J. Desmond, Cy. Clk.

OAKLAND, CAL.—Supervisors have sold the total issue of $800,000 4% bonds for school houses.

LOS ANGELES, CAL.—F. O. Engstrom has the contract for erection of the Polytechnic high school, at $147,397.

WATER SUPPLY AND IRRIGATION.

STRONG, ME.—Strong Water Co. has been incorporated by M. A. Will, Pres., and C. E. Dyer, Treas., City. Capital, $15,000, of which $350 is paid in.

WATERVILLE, ME.—The preliminary surveys for the pipe line to be run to this city from China Lake by the Kennebec Water District have about been completed.

WALPOLE, N. H.—H. E. Cowan, Resident Engr., writes us that bids will be received until July 16 for construction of a water-works for the Walpole Water & Sewer Co. Will consist of a gravity system, filter (slow sand), distributing reservoir of 270,000 gals., and a storage reservoir of 2,000,000 gals.; 3½ miles cast iron water pipe, 6, 8 and 10-in. Coffin hydrants, gates and gate boxes. Donaldson Iron Co. was awarded contract for pipe and specials. Meters, spiral riveted steel pipe, wire fence, etc., are wanted. Freeman C. Coffin, 53 State St., Boston, Mass., is Designing Engr.

MANCHESTER, N. H.—Water Commissioners are reported to be considering filtering Lake Massabesic supply.

AMHERST, MASS.—The Amherst Water Co. will lay new iron pipes on Main and Pleasant Sts.

LEE, MASS.—The Berkshire Water Co. are planning to raise the reservoir dam on October Mountain 4 ft., which will flood several acres more. The work will be begun as soon as the new mains are laid in Lee and Lenoxdale.

SPRINGFIELD, MASS.—Water Commissioners are to seek permission to expend $30,000 or $40,000 in the improvement of sanitary conditions of Ludlow water supply drainage area.

WELLESLEY, MASS.—C. N. Taylor, Contracting Engr., has been awarded the contract to construct a 1,000,000-gal. reservoir, a collecting well, and to lay a mile and a half of 6-in. and 10-in. water pipe at Farmington, N. H.

HARTFORD, CONN.—A petition has been presented to the Mayor and Council asking that water mains be laid in Canal St.

FAR ROCKAWAY (L. I.), N. Y.—The Queens County Water Co. contemplates the purchase of two new pumps, 6,000,000 and 8,000,000 capacity, the construction of a sand filter, erection of a large standpipe, and some four miles extension of mains. Chas. R. Bettes, Ch. Engr.

NEW YORK, N. Y.—Bids are asked by Department of Water Supply, Gas and Electricity, Room 1536, 13 Park Row, until July 27, for laying two 48-in. water mains from Jerome Park Reservoir through Kingsbridge Road and Davidson Ave. to 192d St. John T. Oakley, Comr.

NORWICH, N. Y.—The Water Board is to lay a new 12-in. main at a cost of $15,000.

NIAGARA FALLS, N. Y.—The subject of a new water-works for Niagara Falls has been under discussion for several years and has only just reached the point where it seems as if something definite will be accomplished. Walter McCulloh, Cy. Engr., writes us that the present situation is: that there are two sources of supply, one a private corporation and the other a municipal. The city of Niagara Falls includes the two former villages of Niagara Falls and Suspension Bridge, which united in 1892, forming the city of Niagara Falls. At that time the village of Suspension Bridge owned a water-works taking water from the "Hydraulic Canal," using water power for pumping and taking the water for distribution from the same canal. The village of Niagara Falls was supplied by a private corporation known as the Niagara Falls Water-Works Co., taking water from the Niagara River a short distance above the rapids. Owing to the rapid growth of the city and the location of large factories above the source of supply, and also the emptying of sewage into the river by the city of Buffalo and by two towns, Tonawanda and North Tonawanda, the water has become greatly polluted and the city has been suffering from a large number of typhoid fever cases.

The proposed new water-works system contemplates the purchasing of the Niagara Falls Water-Works Co.'s plant and the discontinuance of the municipal plant which was the old Suspension Bridge plant, and the construction of an entirely new intake and pumping station at a point about two and one-half miles above the falls. The intake will be a tunnel under the bed of the Niagara River, extending out about 4,000 ft. into the clear water channel, at which point a masonry intake crib will be constructed. A new pumping station and new pumping machinery, electric driven, will be placed near the river bank at the inner end of the intake tunnel and a force main laid from this point connecting with the two existing systems of water mains. The plan also contemplates the construction of a filtration plant (a slow sand system) at some future date whenever it shall be deemed advisable to do so. The matter of the construction of this new system will be submitted to the taxpayers at a special election to be called by the Common Council.

The City Engineer submitted to Board Public Works the following estimate of cost for new water-works:

	Minimum.	Maximum.
Purchasing of the Niagara Falls Water-Works Co.'s plant	$350,000	$530,000
Site for new pumping station	30,000	40,000
Intake tunnel and shafts	100,000	110,000
Intake crib	15,000	25,000
Building pumping station	20,000	25,000
Three new pumps	55,000	65,000
Foundation for pumps	8,000	9,000
Valves, chambers and venturi meters	5,000	6,000
New force main	60,000	70,000
Total	$643,000	$880,000

HORSEHEADS, N. Y.—Bids are asked until July 26 for constructing a system of water-works. Plans and specifications may be seen at the office of E. M. Myers, Village Clk. J. F. Witmer, Engr., Buffalo, N. Y. (Advertised, Engineering News.)

EAST ORANGE, N. J.—Bids are asked by City Council until July 25 for 705 tons cast iron pipe, seven tons castings, and distributing and laying 9,600 ft. of 12-in. pipe and 5,300 ft. 16-in. pipe. Specifications and plans on file in office of C. C. Vermeule, Engr., 203 Broadway, New York. Stephen M. Long, Cy. Clk. (Advertised, Engineering News.)

BORDENTOWN, N. J.—C. C. Vermeule has reported to Common Council that Asay's springs will produce 300,000 gals. of water daily, and an ordinance has been introduced to bond the city for $55,000 to construct the new water plant.

PERTH AMBOY, N. J.—A tank containing 150,000 gals. of water was destroyed by lightning at Weber, a suburb of this city. The tank was about 40 ft. above the ground, and supplied the pressure that forced the water into the houses in Weber. It will be rebuilt immediately.

ECONOMY, PA.—The Liberty Land Co. has let a contract to the F. R. Dravo Contracting Co. for a $10,000 pump house and will soon award a contract for seven miles of water mains.

JUNIATA, PA.—Bids are asked by Water Committee, 122 Fifth Ave., until July 22 for construction of 9,000 ft. 4-in. and 8-in. cast-iron water mains.

McKEESPORT, PA.—The Finance Committee of the Council will report favorably on issue of $350,000 bonds. $150,000 of bonds will be for a filtration plant. Bond election will be held on December 20.

SHIPPENSBURG, PA.—The resolution passed by the Town Council, providing for an expenditure of $12,000 for purchasing and laying additional water pipes in the borough, has been returned to them with the veto of Chief Burgess Rummel. The action on the resolution was reconsidered and the resolution carried over the Chief Burgess's veto.

BELAIR, MD.—Philadelphia, Baltimore & Washington R. R. Co., E. F. Brooks, Gen. Supt., Wilmington, Del., according to reports, is to erect a dam near Bell's Mills for water storage purposes. Pipe line will also be constructed.

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COLUMBUS, GA.—The city was granted permission to erect its water-works by Judge Newman on petition of the trustees of the bondholders of the Columbus Water-Works Co.

DUBLIN, GA.—The Water Commission will proceed at once to build a new system of water-works. The Commission ordered their engineer to proceed to Callaway at once to assist in locating a site.

TALLULAH FALLS, GA.—The 2,800-gal. water tank erected and owned by R. L. Moss, which supplies water for the Cliff House, cottages and swimming pool.

MONTGOMERY, ALA.—Henry C. Jones has completed all preliminary details for construction of a water-power plant at Cherokee Bluff, on the Tallahoosa River. Work will begin as soon as the financial arrangements in progress of completion, are consummated. The plant will be built to develop 25,000 HP. and it is proposed to transmit this power to Birmingham, a distance of 85 miles. The main dam is to be 100 ft. high. It is to be constructed of granite, which will be quarried on the spot. The plant when completed, including 85 miles of transmission line to Birmingham, will represent an investment of $2,000,000.

OZARK, ALA.—We are informed regarding the extension of water mains here that the city will, within 60 days, purchase material and do all work. List will be furnished to parties desiring to quote prices. M. McDonald, C. E., is in charge.

MACON, MISS.—Bids are asked by the Mayor and Board of Aldermen until July 27 for constructing a system of water-works in accordance with plans and specifications on file in office of H. L. J. Barnes, Cy. Clk. W. P. & A. D. Wilcox, Engrs., Jackson, Miss. (Advertised, Engineering News.)

DANVILLE, KY.—Bids are asked by Water Committee of Council until July 28 for constructing a filtration plant and extending and raising masonry dam in connection with the water-works system. Plans and specifications may be seen at the office of Henry E. Woolfolk, Mgr. (Advertised, Engineering News.)

BELLEFONTAINE, O.—F. Desormoux & Co., of Springfield, have been awarded two pipe-laying contracts for gas and water mains by the Service Board for $7,233.

CANTON, O.—Following bids were received by Board Public Service for furnishing the 12,000,000-gal. pump, boilers, stokers and other supplies for the improvement of the water-works: William Tod Co., $44,000, $46,000, $47,000, $49,000, $52,000, $54,000; Camden Iron Works, $50,000, $50,000, $53,000; Allis-Chalmers Co., $46,300, $56,500, $61,300, $68,400; Holly Mfg. Co., $49,000, $49,000, $54,350, $55,000, $66,850; Wilson-Snyder, $80,000. Bids were also received on three 200-HP. boilers, running from $6,257 to $10,175. The bids for stokers range from $2,500 to $6,000.

CLEVELAND, O.—Bids are asked by A. R. Calloy, Secy. Brd. Pub. Service, until July 21 for construction of a pumping plant. Plans and specifications can be obtained from City Engineer.

COLUMBUS, O.—Council has adopted resolution to submit to the people at the coming election the proposed $1,500,000 bond issue for the filtration plant. New resolution, however, may have to be brought up submitting the question at the fall election.

LORAIN, O.—Bids asked by Board Public Service until Aug. 1 for construction of a tunnel on the Black River for the purpose of extending water mains. Plans and specifications on file in office of City Engineer. J. J. Mahoning, Clk.

ROCKPORT, O.—Bids are asked by W. L. Mickols, Village Clk., until Aug. 3 for furnishing water pipe, special castings, miscellaneous castings, hydrants and water cranes. Plans and specifications on file in Clerk's office.

GOSHEN, IND.—Bids are asked by Committee on Water Works and Light of the Common Council at the office of City Clerk until July 16 for constructing water main extensions. Ben C. Bender, Cy. Clk.

BELDING, MICH.—F. A. Palmer, C. E., 641 North Water St., Owosso, Mich., writes us that the contract for survey for new water-works has been let to Riggs & Sherman, of Toledo, O. Mr. Palmer is engaged in surveying 13 miles of drain for dredge work in Clinton County, this state. Est. cost, $20,000. Contracts will probably be let in the fall.

HOUGHTON, MICH.—Alex. Stephenson, who represents the Bingham Hardware Co., of Cleveland, O., in the copper country, is said to have formed a company and will make a proposition to the village council for establishing water-works here.

FREDERIC, WIS.—Oscar Claussen, Consult. Engr., of St. Paul, Minn., writes us that the village of Frederic will receive bids until July 28 for a water-works system.

FORT DODGE, IA.—The City Council is considering the matter of mechanical filters and an expenditure of $75,000 for securing pure water. The water-works plant is owned by the city and is valued at $400,000.

ST. PAUL, MINN.—Bids are asked by R. M. Schoffeld, Const. Q.-M., until July 25 for construction of a water system at Fort Snelling, Minn.

PIPESTONE, MINN.—Two bids received by the Indian Department, Washington, D. C., for the improvement of water-works plant at Government Indian School here were rejected, being in excess of the appropriation available. New specifications will be drawn and readvertised.

MARSHALL, MO.—J. R. Phillips, Mayor, writes us that bids will be opened about Aug. 1 for a 500,000-gal. reservoir. A $25,000 bond issue has been voted and carried.

CAMERON, MO.—Bids are asked by Jno. Abbot Clark, Cy. Clk., until July 23 for constructing a reservoir system. Est. cost, $79,000. Hiram Phillips, of St. Louis, is Engr.

BEAUMONT, TEX.—The Beaumont Water Supply Co. is making active preparations for construction of its new water system. Col. I. D. Polk, President of the company, stated that he had closed a deal whereby a lot on Pine St. containing about 5,000 sq. ft. had been purchased from the Kirby Lumber Co. and upon it will be erected the new plant.

GONZALES, TEX.—A company has been formed here for the purpose of putting in an irrigating plant on the Guadalupe River, to cultivate onions. The promoters are W. H. Kokernot, C. E. Dilworth, J. M. Murphy and J. F. Remschel. A steam pumping plant, capable of lifting 2,000 gals. per minute, will be established on the Morningstar property, and from this a canal will be run to the irrigated farm.

TULSA, IND. T.—The Tulsa Water & Light Co. will proceed at once with the erection of a plant.

NORTH YAKIMA, WASH.—Local reports state that the Wiltox ditch will be extended from its present terminus near Selah station over the divide into a tract of land of 5,000 acres lying between the Selah and Wenas. E. G. Fowler is quoted in the report as saying actual construction work will begin in 60 days. Canal will be 16 miles long and will cost $75,000.

VICTORIA, ORE.—At a meeting of County Court permission was granted the Seaside City Council to lay water mains over the county road.

NOLE, CAL.—Bids asked until Aug. 15 for a franchise to lay and maintain water pipes along streets of Pinole. F. Downer, Town Clk.

DUNNVILLE, ONT.—The vote on the by-laws to raise $50,000 to put in a system of water-works was carried. The Council intends calling a special meeting and proceed with the installation at once. The scheme is to pump a filtering basin and pump house at the Beach, with a reservoir on the mountain.

BRANDON, MAN.—Bids are asked by the City of Brandon until Aug. 8 for a pumping engine. Plans and specifications may be obtained from W. H. Shillinglaw, City Engr. J. B. Whitehead, Secy.-Treas. (Advertised, Engineering News.)

VANCOUVER, B. C.—It was voted on the by-law to raise $50,000 to install a water system in North Vancouver. As soon as preliminary details are settled work of building the system will begin.

SEWERAGE.

PORTLAND, ME.—R. D. Shannigan has been awarded the contract for building Section 2 of the West Side intercepting sewer, at $2,836.

LOWELL, MASS.—Sewer Committee has approved many sewer plans. Work will be started soon.

WOONSOCKET, R. I.—Bids are asked until July 28 for building several sewers. Frank H. Mills, Cy. Engr. (Advertised, Engineering News.)

BUFFALO, N. Y.—Thomas McKeown and John Johnson were awarded contract for constructing a 10-in. tile sewer in Chelsea Pl., at $2,492.

William Franklin was lowest bidder, at $1,900, for building a 20, 18, 15 and 12-in. tile sewer in Domedion Ave. He was also the lowest bidder for Edgewood Ave. sewer contract, at $1,950. Bids were referred to Committee on Sewers.

SAUGERTIES, N. Y.—Bids were received by the Board of Sewage Commissioners on July 7 for the construction of sewage disposal works and portion of sewer system, as advertised for in Engineering News. McNamee & Rice, of Kingston, N. Y., were low bidders at $75,200.

Bids are asked until July 22 for the construction of sewage disposal works and portions of permanent sewer system. Estimated maximum cost, $86,000; minimum cost, $60,000. Knight & Hopkins, Engrs., Rome, N. Y. R. B. Overbagh, Secy. Sewer Comrs. (Advertised, Engineering News.)

SLOAN, N. Y.—Village is considering project to connect with Buffalo sewer system. John H. Meahl, Pres.; Edward Werrick, Village Atty. Matter has been referred to the Department of Public Works and the Engineering Bureau of Buffalo.

HUNTINGTON (L. I.), N. Y.—Vincent Ford, Chn. Com., writes that Citizen's Sewer Committee has matter of a sewer system under consideration. No report has yet been made.

EDGEWATER, N. J.—Preliminary plans for a sewer system have been made by Willard Cass, Cy. Engr., Englewood, N. J.

AVON, N. J.—Council has passed resolutions authorizing the purchase of the Batchellor sewer and water systems and the grounds at the railroad depot for $50,000.

CALDWELL, N. J.—Estimates for proposed sewer system for the borough have been received by Council. Total cost was placed at $33,134 and $25,000.

WASHINGTON, N. J.—Alex. Anderson, Cy. Engr., writes us that surveys are being run for proposed sewerage, to prepare estimates of cost for purpose of calling an election. In the event of the Street Committee constructing the sewer system, vitrified tile pipe, manhole caps, flush tanks, etc., would be required.

McKEESPORT, PA.—The Finance Committee of the Council will favorably report the issuance of $350,000 bonds. $70,000 will be used for main sewer system. Bond election will be held on December 20.

INGRAM, PA.—John McBride, Boro. Engineer, Room 46, Fidelity Bldg., Pittsburg, will receive bids until July 22 for construction of 1,900 ft. of 8, 9 and 10-in. sewers.

NORRISTOWN, PA.—Bids are asked until Aug. 1 for construction of salt-glazed vitrified pipe sanitary sewers, with laterals, flush tanks, manholes, etc. Wm. J. Wells, Chn. Sewer Com., 1221 Arch St.

WASHINGTON, D. C.—Bids are asked until July 25 for constructing the lower section of the sewage disposal system, Rock Creek and B St. intercepting sewer. Henry B. F. MacFarland, Comr. (Advertised, Engineering News.)

Bids are asked until August 8 for constructing the 4½ street high level intercepting sewer, sewage disposal system. Henry B. F. MacFarland, Comr. (Advertised, Engineering News.)

The bid of William Wirt Clarke & Son, of Baltimore, for furnishing the bulk of the terra-cotta sewer pipe and other material for sewer construction, was accepted by the District Commissioners. The accepted bid, and that of the Potomac Terra-Cotta Company, of Washington, were identical, aggregating, in each instance, $19,820. On the remainder of the supplies, however, the bid submitted by the Baltimore firm was about $50 lower.

District Commissioners have awarded the contract for the construction of the low area trunk sewer on Pennsylvania Ave., between John Marshall Pl. and 13th St., N. W., to Edmund Saxton, at $36,835. The work will be done by the open cut method, instead of the tunnel system.

GREENSBORO, N. C.—Bids are asked until July 15 for building a septic tank, with necessary outfall and sewer pipe. J. M. Bandy, Cy. Engr.

NASHVILLE, TENN.—T. V. Barnsfield has been awarded a contract for constructing an extension 4 ft. 6-in. in diameter to what is known as the cotton factory sewer, at $2,281.

HAMILTON, O.—The Clerk of the Board of Public Service has been authorized to advertise for bids for the construction of a sewer on Heaton St. and Central Ave.

COLUMBUS, O.—The Council has authorized the Board of Public Service to advertise for bids for cast-iron pipe, to carry sewage of the city under the Scioto River. Estimated cost, $118,000.

CUYAHOGA FALLS, O.—The Council is considering the establishment of a complete sewer system. Estimated cost, $80,000.

NEWARK, O.—Bids will be received at the office of the Board of Public Service until noon July 21 for constructing a tile drainage sewer in Pine St. Frank T. Maurath, Clk.

TERRE HAUTE, IND.—Contract for the sewer system of Spruce, 12th and 23d Sts. was awarded to Jesse Roberson, at $3,852.

HAVANA, ILL.—Bids are asked for construction of a sewer until July 20th. Work consists of 1,616 ft. of 42-in. brick sewer, of which 800 ft. is tunnel work; 415 ft. 24 × 36-in. brick sewer, and 400 ft. of tile sewer. J. J. Donaldson, T. F. Trumpy, John Moore, Com. on Streets and Sewer.

URBANA, ILL.—Bids are asked until July 22 by the Board Local Improvements for the construction of approximately ten miles of sanitary sewerage and septic tank. John A. Glover, Pres. Bd. (Advertised, Engineering News.)

DIXON, ILL.—Bids are asked until July 15 for construction of a 12-in. intercepting sewer, with appurtenances. I. F. Edwards, Pres. Bd. Local Improvements.

CHICAGO, ILL.—C. D. Hill, Engr., Bd. Local Improvements, writes us that bids will be received by the Board until July 26 for building the Jackson Park Ave. sewage pumping station and sewer system.

GRAND RAPIDS, MICH.—L. W. Anderson, Cy. Engr., writes us that bids will be received until July 27 for constructing 1,200 ft. of 48-in., 887 ft. of 46-in., and 1,650 ft. of 44-in. concrete sewer in Canal St.

WEBSTER CITY, IA.—P. M. Banks, Cy. Clk., informs us that bids received on July 2 for sewerage work were rejected.

MUSCATINE, IA.—All bids for building Division St. sewer have been rejected by Council. W. N. Dearborn Co., of Stone City, was lowest bidder, at $9,356.

DES MOINES, IA.—Bids are asked until July 18 for various sewerage work. W. W. Wise and J. W. Campbell, Bd. Pub. Wks. N. B. Vertrees, Cy. Clk.

VIRGINIA, MINN.—Bids are asked until July 26 for building a complete sanitary sewer in various streets. M. L. Fay, Mayor. A. N. Thompson, Cy. Clk.

WIARTON, ONT.—Bids are asked until July 16 for constructing sewers. Wm. Irwin, Chn. Bd. of Works. R. McDowall, C. E., is Town Engr.

GARBAGE DISPOSAL—STREET CLEANING

McKEESPORT, PA.—Mayor Falkenstein has signed the resolution selecting a Third Ward site for the new garbage furnace.

SACRAMENTO, CAL.—Resolution was adopted by Trustees calling for advertising for a garbage crematory to dispose of the garbage for a city of 40,000 inhabitants.

STREETS AND ROADS.

METHUEN, MASS.—This town will expend $3,500 in widening Pleasant St.

SPRINGFIELD, MASS.—The Board of Public Works will submit the report on the new Watershops pond boulevard to the City Council at the next meeting. The entire cost of the work in laying out the new roadway is estimated as $28,220. The Board recommends the laying out of the boulevard 100 ft. wide from Alden St. to the Wilbraham road.

WHITMAN, MASS.—The County Commissioners have called for a hearing at Whitman on July 29, when the question of widening South Ave. will be considered.

HARTFORD, CONN.—Highway Commissioner Macdonald has awarded to Vito Freda of Meridan a contract for 3,990 lin. ft. of grading in Branford at $3,152.

SOUTHINGTON, CONN.—The contract for building the Meridan Ave. macadam road has been awarded to F. T. Ley, of Springfield, Mass., the lowest bidder. Work is to be started at once. The contract calls for about 6,000 ft. of highway.

AUBURN, N. Y.—Bids asked by Mayor Osborne until July 18 for paving Hamilton Ave., North and East Genesee Sts.

AMSTERDAM, N. Y.—F. E. Crane, Cy. Engr., informs us that T. Henry Dumary, of Albany, was awarded the contract for fire clay brick pavement at $20,197.

ALBANY, N. Y.—Bids are asked by Board of Contract and Supply until July 18 for grading, curbing and paving Sloan St. with granite blocks; also for repairing and laying sidewalks with flags and vitrified bricks, and building receiving basins. Specifications can be seen at the office of Board, City Hall. Isidore Wechsman, Clk. of Bd.

BROOKLYN, N. Y.—Public Works Commissioner Brackenridge announced that Borough President Littleton would authorize the paving of Atlantic Ave. Engineer Tillson, of the Public Works Department, has figured that the cost of paving the avenue would be $245,000.

NEW YORK, N. Y.—The city of New York has awarded to the United States Wood Preserving Co., of 29 Broadway, contract for paving Metropolitan Ave., in the Borough of Queens, about 12,500 sq. yds., with creo-resinate wood block, and over 20,000 sq. yds. of work in the Borough of Brooklyn. This company has also recently secured contract for 12,000 sq. yds. of paving in Springfield, Mass., and 5,000 sq. yds. for Main St., Holyoke, Mass.

SCHENECTADY, N. Y.—The contract for the work of eliminating the grade crossings in this city has been awarded to D. D. Streeter, of Chicago, for $312,485. It is expected the work will be started within a week, and pushed to completion. It is estimated the whole work will consume about two years.

OSWEGO, N. Y.—Bids are asked by W. M. Coulling, Capt. and Q. M., U. S. A., until Aug. 11 for grading and turfing at Fort Ontario. (Advertised, Engineering News.)

HOBOKEN, N. J.—Bids are asked until July 27 for grading, resetting curb, relaying crosswalks and repaving roadway on Newark St. James H. Londrigan, Cy. Clk.

PATERSON, N. J.—Bids are asked by Road Committee of Board of Chosen Freeholders of Passaic County, until July 15 at Clerk's office, in the Court House, for repairing several streets. Geo. W. Botbyl, Clk.

WASHINGTON, PA.—J. K. Weir, Clk. of Council, will receive bids on grading and paving with vitrified brick about 75,000 sq. yds. of street.

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

DU BOIS, PA.—Bids are asked until July 19 for the paving of South Jared St. in accordance with plans and specifications on file at office of Clerk. Walter Hatten, Chn. St. Com.

ELKTON, MD.—(See Bridges.)

CUMBERLAND, MD.—A petition to have Centre St. paved with brick was presented and referred to the ordinance committee. An ordinance providing for the widening of Little Frederick St. was also referred to the ordinance committee.

NORFOLK, VA.—Bids are asked by Local Board of Improvements, Park Place, until July 23 for laying approximately 20,000 sq. yds. of sidewalk pavement. Specifications on file in office of Board. R. W. Tomlin, Secy., Main St.

WILLIAMSBURG, VA.—City Council decided at a special meeting, to improve the streets of the town.

TAMPA, FLA.—At a joint meeting of the City Council and Board Public Works it was decided to bond the city for $500,000 for paving, etc.

PICKENS, S. C.—Bids are asked by A. B. Talley, County Comr., until July 15 for grading and building a new road, about a half a mile in length.

SHREVEPORT, LA.—Bids are asked until July 18 for paving on Market St. about 3,370 sq. yds.; for grading Pierre Ave. C. G. Rives, Comptroller.

AKRON, O.—Bids are asked by Board Public Works until July 21 for the improvement of Bell and West South Sts. by grading, curbing with stone, guttering with brick and macadamizing the roadway, in accordance with the plans, profile and specifications on file in the office of Board, Chas. H. Watters, Secy.

City sidewalks are to receive the early attention of the Council.

CINCINNATI, O.—The contract for paving Watson St. with brick was awarded to G. P. Walker at his bid of $9,404 by the Board Public Service.

COLUMBUS, O.—Mayor Jeffrey has decided that it will be necessary to ask the City Council to pass an ordinance authorizing a bond issue of $60,000 or $70,000 for street repairs.

DAYTON, O.—Bonds will be sold July 30, proceeds to be used for the repairing of streets and for the constructing of a fire cistern.

HAMILTON, O.—Wm. M. Andrews, City, has been awarded the contract for paving the streets.

KENT, O.—The Council has been petitioned and has passed an ordinance to pave Main St. with vitrified brick.

PORTSMOUTH, O.—The Council has been petitioned to pave East Ninth St. with Bere stone.

SPRINGFIELD, O.—The Council has passed an ordinance to pave with brick a section of Lagonda Ave.

Council has passed an ordinance to pave Rose St. and Locust Ave. with brick.

SPRINGFIELD, O.—It is probable that East High St. will be laid with asphalt with the exception of between the street car tracks and for a distance of 18 ins. from the outer rails. This space will be paved with brick. It is estimated that there will be 4,424 sq. yds. of brick paving and 6,950 sq. yds. of asphalt.

ASHLAND, O.—The Council has adopted resolutions for the paving of Pleasant and Sandusky Sts. and Cleveland Ave.

CINCINNATI, O.—Bids are asked by Board Public Service until Aug. 3 for grading, curbing and paving Ellison Ave. and Hackberry St. with brick. Geo. F. Holmes, Clk.

Council has passed ordinances to pave Walnut and Main Sts. with asphalt.

COLUMBUS, O.—Council has adopted resolutions for the paving of sections of Sixth and Grant Sts. and Pennsylvania Ave.

CLEVELAND, O.—The County Commissioners will raise $240,000 for road improvements.

IRONTON, O.—T. J. Mulligan, contractor, has been awarded contracts for street improvements aggregating $40,000.

NEWBURGH (STA. CLEVELAND), O.—Bids are asked by Board Public Service until July 22 for grading, paving, etc., on Hope and Kinsman Sts.

TOLEDO, O.—Chas. W. McKinney has been awarded the contract for paving 21st St. with Massillon blocks, with Medina curbing, for $1,964.

CRAWFORDSVILLE, IND.—Bids are asked by H. B. Hullett, Cy. Clk., until July 25 for the improvement of Pike St. and Market St., according to plans and specifications.

PAOLI, IND.—Geo. W. Tegarden, Audr. Orange County, writes us that the contract for roads advertised on July 7 was not awarded because the Board thought the competition on some of the roads was insufficient and they decided to readvertise on Aug. 5.

SPENCER, IND.—Bids are asked by Board of Trustees until July 16 for laying cement sidewalks on several streets. Plans and specifications on file in office of Town Clerk.

MUNCIE, IND.—Councilman Jos. Porter states that it is very probable that some street paving will be done this summer.

GRAND RAPIDS, MICH.—Quigley Ave. will be improved this year.

ESCANABA, MICH.—Bids are asked by H. J. Roberston, Cy. Clk., until July 19 for paving, curbing and draining of Sarah St. with stone macadam. Plans and specifications on file in office of Clerk.

DE KALB, ILL.—Bids are asked until July 16 for construction of about 13,000 yds. of brick pavement and 8,000 yds. combined 6-in. curb and 18-in. gutter. Specifications will be furnished on application by F. E. Wright, Cy. Clk.

PARIS, ILL.—The contract for paving Tenth St. was awarded to Morrisey & Porter, of Paris, by Board Local Improvements for $18,816.

FREEPORT, ILL.—The contract for the paving of Upper Stephenson, portions of Cherry and Walnut Sts., was let by Board Local Improvements to Wm. Ascher for $43,000.

DES MOINES, IA.—Bids asked by Board Public Works until July 21 for paving West 16th St., with one course of No. 1 vitrified paving brick on six inches of broken stone concrete foundation with Portland cement top filler, about 916 sq. yds. of paving. W. W. Wise and J. W. Campbell, Bd. Pub. Wks.

DES MOINES, IA.—Bids are asked by Board Public Works until July 23 for curbing with Portland cement Clover Lane, about 1,255 lin. ft. of curbing.

Bids are asked for paving East Seventh St. and Pennsylvania Ave. with one course of No. 1 repressed vitrified paving brick on present concrete foundation with Portland cement top filler; about 3,518 sq. yds. of paving. Bids will also be received for extra concrete per cubic yard.

WICHITA, KAN.—Bids asked by J. L. Leland, Cy. Clk., until July 18, for laying curbs on several streets.

SEDALIA, MO.—Bids asked by City Council until July 18 for construction of several brick sidewalks. C. E. Baker, Cy. Clk.

BROOKFIELD, MO.—Chas. K. Hart, Clk., informs us that the contract for two blocks of paving will be let July 18. C. G. Bigger, Cy. Engr.

ST. JOSEPH, MO.—The Board Public Works awarded the following contracts to the Phoenix Brick & Construction Co.: To macadamize Messanie St.; pave with vitrified brick the alley in block 59, Robidoux addition, and Water St.

CLEBURNE, TEX.—City will issue $25,000 street improvement bonds.

BERKELEY, CAL.—Resolutions for guttering and macadamizing California St. and for grading, curbing and macadamizing Woolsey St. were passed by Board of Trustees.

EMERYVILLE, CAL.—The Town Engineer was asked by the Trustees to prepare plans for the grading, curbing and macadamizing of Landregan Ave.

RIVERSIDE, CAL.—Bids are asked by W. W. Phelps, County Clk., until July 18 for construction of a portion of the Banning-Idyllwild county road.

OGDEN, UTAH.—Bids are asked by A. F. Parker, Cy. Engr., until July 18 for grading and paving on Wall Ave.

MANUFACTURING PLANTS.

FALL RIVER, MASS.—The Durfee Cotton Mills will build a two-story addition to the picker mill, 16 × 51 ft.; a stone addition to the engine room, 40 × 85 ft., and to the boiler house, 32 × 45 ft.

NORWALK, CONN.—The Nicholas Underwear Co. has been incorporated with a capital stock of $50,000.

The contract for the proposed new factory for Boese, Peppard & Co. has been awarded to the H. Wales Lines Co., of Meriden. The new building will be 68 × 144 ft., of heavy mill construction, one end being separated from the main building by a fire wall, making this section fireproof, with cement floors and concrete and steel roof.

WATERTOWN, CONN.—The contract has been awarded by the Heminway & Bartlett Silk Co. for a new boiler house. The building will be one story high, 20 × 40 ft., of brick and concrete. Work will be commenced at once.

BUFFALO, N. Y.—It is reported that the Lackawanna Steel Co. will expend $5,000,000 on new plants in Buffalo.

DESPATCH, N. Y.—Ransome & Smith Co., Archs., 11 Broadway, New York, have been awarded the contract for the erection of seven factory buildings for the Vanderbilt Realty Co. at this place. These buildings, which will be used by the Foster-Armstrong Piano Co., will be constructed entirely of reinforced concrete under the Ransome system.

HUNTINGTON (L. I.), N. Y.—The Electro-Magnetic Railway Construction & Supply Co., 11th Ave. and 26th St., New York, has secured four acres of land here upon which the company intends erecting a factory and engine works.

BROOKLYN, N. Y.—Fire destroyed the factory of the Vehicle Equipment Co. at Church Ave. and 36th St. Loss, $200,000.

OGDENSBURG, N. Y.—Bill, Bell & Co. has incorporated with $100,000 cap. stock. It is proposed to operate four mills, etc. The directors are: James R. Bill, C. O. R. Bell and Ed. W. Douglas, of Ogdensburg.

ROCHESTER, N. Y.—A site of twenty acres has been secured by the Gleason Works on which they propose the construction of a new plant.

PATERSON, N. J.—I. A. Hall writes us that he will rebuild mill recently destroyed by fire. New building will be five stories, mill construction, 50 × 200 ft. Cost, $60,000. One Corliss engine, 18 × 42; one high-speed 150-HP. engine, one 100-KW. d. c. dynamo, etc., will be required.

CAMDEN, N. J.—The Hoffman-Corr Mfg. Co., Philadelphia, cotton yarns, twine, nets and cotton waste, contemplates the establishment of a spinning mill here.

ERIE, PA.—The Hollands Mfg. Co. has increased its capital stock to $100,000 for the purpose of constructing additions and making improvements to their plant.

WASHINGTON, PA.—W. D. Gardner is interested in the Gardner Convertible Gas & Steam Engine Co., which has recently been organized with a capital stock of $50,000. It is reported that a new plant for the manufacture of gasoline engines will be erected.

BALTIMORE, MD.—Fire destroyed the Maryland Veneering Co.'s plant at Highlandtown. Loss, $30,000.

WASHINGTON, D. C.—Bids asked by Commissioner of Indian Affairs until Aug. 2 for the erection of a laundry and industrial buildings.

NORFOLK, VA.—The Navy Department has just purchased 270 acres of land adjoining the Norfolk yard. The plan of the department is to spend several million dollars in the construction of dry-docks and shops on this land, provided the necessary appropriations can be had.

WINCHESTER, VA.—The Virginia Woolen Co. will rebuild its woolen mill, recently burned at a loss of $50,000. It will manufacture cloth for men and boys' clothing.

BURLINGTON, N. C.—The Delta Cotton Mills have been incorporated by R. W. Stokes, J. E. Corrigan and J. A. Holt, with capital of $12,000.

CHARLOTTE, N. C.—The Georgia Wood Fiber Plaster Co. will erect a factory at Park Ave. and Boulevard, Dilworth. The main building will be 60 × 32 ft. and two stories high and will have a wing at either end. Cost, $15,000. W. B. Drisbo, of Atlanta, Ga., is Secy.

FAYETTEVILLE, N. C.—The Lafayette Hosiery Mills have been sold to F. H. Cotton, who will enlarge the plant and add new machinery.

LYNN, N. C.—The Tryon Hosiery Co. will improve its knitting plant, to include the erection of an additional building 50 × 150 ft. Plans and specifications for the structure are being prepared.

CLINTON, S. C.—The Clinton Cotton Mill will increase its capital from $100,000 to $150,000 in order to enlarge its plant.

CHARLESTON, S. C.—The Southern Hydraulic & Brick Co. has increased its capital stock from $25,000 to $40,000.

GAFFNEY, S. C.—The Limestone Mfg. Co. is to double the present capacity of its mill—13,500 spindles and 400 looms.

ATHENS, GA.—Dozier & Co. will build a mill for the manufacture of cotton netting.

ATLANTA, GA.—Ground has been broken for an addition 50 × 100 ft., two stories, to the Gate City Cotton Mills. A church, school building and cottages are also being erected by the company. About $40,000 is to be spent for these and for new machinery.

COLUMBUS, GA.—The Georgia Fertilizer Co. has incorporated with $50,000 cap. stock. It is understood that the company has secured a site for their factory and will soon start construction work. The incorporators are: O. C. Bullock and J. T. Fletcher, City; J. W. Howard and J. H. Carpenter, of Tennessee.

TAMPA, FLA.—The Salvador Alvare Co., capital $25,000, has been chartered to manufacture cigars and tobacco. Fred. Thompson, Walker W. Pierce and Herman Rosenthal are the incorporators.

MAGNOLIA, MISS.—The Magnolia Cotton Mill will increase its capacity to double its output. L. L. Lampton is Pres. Bd. of Directors.

NEW ORLEANS, LA.—The Moss-Acme Laundry has been chartered with $25,000 capital. The incorporators are: A. Trigg Moss, John Clegg, Stone Walker Moss and W. Underwood Moss.

CHATTANOOGA, TENN.—About $10,000 is to be expended by the Chattanooga Pipe & Foundry Co. for construction of a new addition.

The Southern Steel Works have advertised for bids for a new steel foundry to cost about $30,000.

MEMPHIS, TENN.—A $25,000 piano factory will probably be located here. Secretary of the Industrial League can inform.

NASHVILLE, TENN.—The Harley Pottery Co. will increase its capital stock from $10,000 to $50,000, according to the "Pink Sheet Daily Bulletin." A new factory will be erected, which will double the capacity of the present plant. The company is composed of H. J. Harley, W. H. Harley and H. W. Buttorff.

GLASGOW, KY.—W. W. Johnston and others will establish a canning factory here.

BOWLING GREEN, O.—S. Strauch contemplates establishing a factory for the manufacture of shirt waists, petticoats and gowns.

CINCINNATI, O.—Geo. W. Dittmann has asked for a permit to erect a 6-story brick, steel and stone factory at Sycamore and Canal Sts., to cost $50,000. The Krippendorf-Dittmann Co. also requested a permit to erect a 7-story brick, steel and stone factory building at 311 East Seventh St., to cost $13,000. Samuel Hannaford & Sons have prepared plans for both buildings.

CINCINNATI, O.—The Armleder Carriage Co. will erect a 4-story factory on Charles St., adjoining the present plant. Cost, $35,000.

The Coost & Coost Co., of New Castle, Ind., are planning to build a plant on Spring Grove Ave. for granite manufacture.

CLEVELAND, O.—Frank D. Skeel, Arch., 719 Caxton Bldg., has plans for a factory building to be erected on Doan Ave., East Cleveland, for the Truss Cable Fence Co.

LEIPSIC, O.—The American Foundry Co. has incorporated with $50,000 cap. stock. Plans are being prepared for a two-story building, 60 × 200 ft. W. W. Edwards is Pres.

TOLEDO, O.—The Northwestern Ohio Bottling Co., E. D. Libbey, President, will erect a factory here for the manufacture of machinery-blown bottles.

DECATUR, IND.—The Decatur Cement Roof & Block Co. has incorporated with a capital stock of $10,000. The company will erect a plant for the manufacture of cement roofing, cement blocks and all other kinds of artificial stone work. Jno. B. Holthouse, Henry Hite, John Everett and others are incorporators.

DETROIT, MICH.—The Detroit Motor Car Co. has been incorporated with a capital stock of $400,000 by W. W. Patterson, H. J. Newman, I. R. Sexton, Philip Heseltine and Frank E. Miles. The company is in the market for a complete automobile factory equipment and is interested in machine tools, automobile parts, drop forgings, etc. Office, 1102 Majestic Bldg.

F. H. Clergue, A. B. Colvin and W. F. Fitch, of Detroit, are organizing a company which will soon begin the construction of a coke plant in the Michigan Soo at a total cost of $750,000. It is the intention of the new concern to furnish coal for all railroads near the plant as well as for numerous industries in the vicinity. It is thought this company will handle about 350,000 to 400,000 tons of coal annually, using the fine coal or screenings for coke making.

FENTON, MICH.—Pollmar & Ropes, Archs., 25-26 Cleland Bldg., Detroit, have prepared plans for a new factory building for the Concrete Mfg. Co. Two stories, brick and cement, 100 × 40 ft., having steam heat and electric lighting.

GRAND RAPIDS, MICH.—Plans are being prepared by W. G. Robinson, Arch., for the new factory buildings to be built on Canal St. by the Wolverine Brass Works. L. A. Cornelius is Pres.

BENTON HARBOR, MICH.—Fred. M. Steele, of Chicago, Ill., and Madison Cooper, Refrigerating Engr., of Minneapolis, Minn., are planning to build a large cold storage warehouse at Benton Harbor.

CHICAGO, ILL.—Paul Gerhardt, Arch., Schiller Bldg., has completed plans for a factory to be built at Kingsbury and Huron Sts. for John L. Rodgers. It will be seven stories, 100 × 150 ft., of skeleton and mill construction.

H. G. Wright, of Armour & Co.'s construction department, Union Stock Yards, has plans for the reconstruction of a large soap factory at 31st Place and Benson St. Will be six stories, 306 × 126 ft., probably of heavy mill construction, with brick exterior, composition roof.

JOLIET, ILL.—Plans have been prepared by John H. Barnes, Arch., 30 Young Bldg., for a factory building for the Gexhortz Piano Co. It will be a brick structure, having structural iron and steel work, steam heat, composition roof, etc., to cost $16,000.

WATERTOWN, WIS.—The Beals & Torrey Shoe Co., of Milwaukee, will move their plant to this city. A new plant will be built, to cost $30,000.

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GRAND RAPIDS, WIS.—A site has been secured by the Grand Rapids Foundry Co. for the erection of a machine shop, foundry and pattern house. The building will be constructed of concrete blocks.

MILWAUKEE, WIS.—Plans have been prepared by Anton Dohmen, Arch., 17-29 Third St., for a factory and basement brick factory building, 60 × 175 ft., to be built at Market and Biddle Sts. for Cotzhausen Bros.

SWISHER, IA.—It is reported that a new elevating will be built here by the Jackson Elevator Co. of Cedar Rapids.

CAMPBELL, MINN.—The Farmers' Elevator Co., recently organized, will erect an elevator here.

TOPEKA, KAN.—Plans have been prepared by M. Wood, Arch., 629 Kansas Ave., for a foundry building, 75 × 132 ft., for Millice & Holcomb. Cost, $7,000. Bids will be received by the architect.

TABLE ROCK, NEB.—A site has been secured by W. Butterfield & Sons, of Humboldt, for the erection of an elevator building.

OMAHA, NEB.—About $40,000 will be expended by the Val Blatz Brewing Co. for the erection of a new malt house.

FORT WORTH, TEX.—The Empire Grain Co. will erect an elevator and handling house, with a capacity of 100,000 bus. Cost, $50,000.

COLUSA, CAL.—Colusa citizens have raised $150,000 as their share toward the beet sugar factory that will be built here. The other $300,000 will be furnished by San Francisco capitalists.

MARYSVILLE, CAL.—It is understood that the Swain & Hudson planing mill, recently destroyed by fire, will be rebuilt either this year or next.

SAN FRANCISCO, CAL.—E. B. Bradon, of Helena, Mont., reports that he has received instructions to prepare plans for a parting plant to be erected at San Francisco by the American Smelting & Refining Co. and to purchase ground for the works. The plant will cost approximately $75,000 or $100,000. It will be for the parting of gold and silver.

ST. JOHNS, ORE.—The plant of the Portland Woolen Mills is to be rebuilt on a new site at St. Johns. Four buildings will be erected, the main factory being 200 × 100 ft., two stories.

PORT STEELE, B. C.—W. Crowston will install a saw mill at Burnt Bridge Creek. The mill will have capacity of 20,000 to 30,000 ft.

MISCELLANEOUS CONTRACTS.

DITCH.—Chaska, Minn.—Bids are asked by J. B. Connolly, County Audr., until August 1 for building a ditch.

DREDGING.—Wilmington, Del.—Bids are asked for dredging in St. Jones River, Del. C. A. F. Flagler, Engrs. (Advertised, Engineering News.)

WHARF.—Port Townsend, Wash.—Bids are asked by Geo. H. Penrose, Q.-M., Port Townsend, until July 16 for the repair of wharf at Port Flagler, Wash.

MINING.—Helena, Mont.—Indian Queen Mining & Smelting Co. has been incorporated by W. E. Reynolds, T. F. Stephens and T. W. Ellis. Cap., $4,500,000.

DITCH.—Warsaw, Ind.—Wallace J. Dillingham, Surv. Kosciusko County, has made plans for the Dausman ditch. It will be 21 miles long; cost, about $48,000.

DREDGING.—Wilmington, Del.—Bids are asked until July 18 for dredging in Mispillion River, Del. C. A. F. Flagler, Capt. (Advertised, Engineering News.)

CANAL.—New Orleans, La.—Bids are asked until Aug. 22 for the completion of Taylor Ave. canal, including flood gate. Geo. G. Earl, Gen. Supt.; F. S. Shields, Secy.

WHARF.—New London, Conn.—Bids are asked until July 15 for constructing addition to wharf at Fort Terry, N. Y. Address Constructing Quartermaster, New London, Conn.

DREDGING.—Montgomery, Ala.—Bids are asked until July 21 for dredging at the mouth of Apalachicola River. Flad J. B. Cavanaugh, Engrs. (Advertised, Engineering News.)

VESSEL YARD, ETC.—Duluth, Minn.—Bids are asked until August 8 for building vessel yard and removing buildings here. Chas. L. Potter, Capt. (Advertised, Engineering News.)

PIG IRON.—Philadelphia, Pa.—"Public Ledger" states that the General Electric Co. is in the market for 600 tons of pig iron, including high silicon and low phosphorus, for early shipment.

MINING MACHINERY.—Spokane, Wash.—H. F. Nather, Secy. Emma Ruth Mining and Milling Co., writes us that company is at present developing a mineral claim and in time will need machinery for same.

COAL BUNKERS.—Boston, Mass.—Specifications for eight 50-ton steel and concrete coal bunkers in building 108, Navy Yard, are on file at office of Engineering News, New York. Bids are asked until July 16.

PILES.—Youngstown, O.—Bids are asked by Board Public Service until July 20 for furnishing and driving 42 piles in river at pumping station. Specifications can be seen at office of Board. E. T. Prosser, Clk.

ORE LINE.—Vancouver, B. C.—A contract for the construction of a gravity ore tram line from Britannia Landing, Howe Sound, to the Jane aBsin, a distance of 17,000 ft., has been let to R. C. Riblett, at $72,000.

DREDGING.—Chicago, Ill.—Specifications for dredging in Calumet River, Ill., are on file at office of Engineering News, New York. Bids are advertised in Engineering News until July 26. O. H. Ernst, Col., Engrs.

MINING PLANT.—Salt Lake, Utah.—Negotiations are pending between the Norn Silver Mining Co. and O. B. and A. B. Peck for the construction of a plant for the treatment of zinc ores at the Beaver county property.

LEVEE WORK.—Memphis, Tenn.—Bids are asked until July 28 by E. W. Van C. Lucas, Engrs., for about 3,700,000 cu. yds. of levee work in First, Second and Third Dists., Mississippi River Improvement. (Advertised, Engineering News.)

LIGHTHOUSE TENDER.—Baltimore, Md.—Bids were received for hauling out and making repairs to the hull, engine and boilers of the lighthouse tender "Holly." The lowest bid was $1,360.59, made by the Marine Railway Machine & Boiler Works.

NAVY YARD EXTENSION.—Norfolk, Va.—The Navy Department has purchased over 270 acres of land adjoining the Norfolk Navy Yard at a price of $400,000. This purchase is part of an improvement to be made on an extensive scale there. There will be a large area for marine barracks, for drydocks for building ships and fresh water basins. The scheme will involve considerable work on the channel leading to the navy yard from Hampton Roads.

CULVERT.—Los Angeles, Cal.—Bids are asked by Board of Supervisors of Los Angeles County until July 25 for all material and labor for the construction of a concrete-steel culvert on El Monte Road in the Alhambra Road District. C. G. Keyes, County Clk.

OIL AND MINERALS.—Beaumont, Tex.—Sun Pipe Line Co. has incorporated, with $100,000 capital, to prospect for oil and other minerals; incorporators, J. Edgar Pew, Fort Gooderham, of Beaumont, Frank Cross of Philadelphia, Pa.; J. N. Pew and Arthur E. Pew of Pittsburg, Pa.

PIKES.—Boston, Mass.—Bids are asked until July 21 by Board of Harbor and Land Commissioners for building piles at the cut-through into Stage Harbor, Chatham, and City at Buck's Creek, South Chatham. Woodward Emery, Charles C. Doten, George E. Smith, Comrs.

DAM.—Berkeley, Cal.—Experimental work for the great dam the Government is to build in Nevada to conserve the waters of the Truckee and Carson rivers, as part of the project to reclaim 375,000 acres, is being done at the University of California by U. S. Geological Survey engineers.

CANAL.—Imperial, Cal.—C. R. Rockwood, Ch. Engr. of the California Development Co., has been engaged in the survey of a 60-ft. canal from Sharp's heading, a mile south of the Mexican line, to the No. 5 main canal, ten miles. Canal to be twelve miles in length, and cost $25,000.

FIRE APPARATUS.—Paterson, N. J.—Finance and Fire Department Committee at a special meeting voted to recommend to the Board of Aldermen that bonds for the purchase of two more new fire engines be issued, and also for the necessary equipment; 5,000 ft. of new hose was ordered.

DRY DOCK.—New York, N. Y.—Bids are asked by Bureau of Yards and Docks, U. S. N., Washington, D. C., until August 27 for constructing a concrete and granite dry dock. Plans and specifications will be furnished by Bureau upon deposit of $100. Mordecai T. Endicott, Ch. of Bureau.

WIRELESS TELEGRAPH STATION.—San Francisco, Cal.—The Navy Department has received permission from the Department of Commerce and Labor to establish a wireless telegraph station on Farallone Island, off San Francisco. Arrangements are being made to equip a station at once.

SUPPLIES.—Memphis, Tenn.—Bids are asked until July 28 for furnishing and delivering wire, wire strand, cable clips, rip-rap, stone and quarry spalls, etc., for use in First, Second and Third Districts, Mississippi River Improvement. E. W. Van C. Lucas, Engrs. (Advertised, Engineering News.)

WALLS.—Cartersville, Ga.—Bids are asked by County Commissioners, of Bartow County, until July 16 for building walls around the court house lot, with steps and curbing for walks, etc. Plans and specifications at office of John H. Wikle, City. John S. Leak, Chn., R. J. Raiden, Clk., Bd. Comrs. Roads.

TUNNEL.—Lorain, O.—Bids are asked by Board Public Service until August for construction of a tunnel under Black River, near the Erie Ave. draw bridge, for the purpose of extending water mains across the river, according to the plans and specifications on file in office of City Engineer. J. J. Mahony, Clk.

CHANNEL.—New York, N. Y.—An appropriation probably will be asked of the next Congress to dredge Hell Gate, in the East River, or a plan that has been suggested by United States engineers may be recommended; it is to cut off about 200 ft. of Hallett's Point, on the Long Island shore, just below Ward's Island.

IRON MINES.—Natural Bridge, Va.—Buena Vista Mining Co., reported organized for the development of 8,000 acres of hematite iron ore near this city, will erect a washery for cleansing the ores and also install steam shovels for mining and locomotives for transferring the ores from the mines to washery. John A. Grazier, of Johnstown, Pa., may be addressed.

TELEPHONE LINE.—Phoenix, Ariz.—The Consolidated Telephone, Telegraph & Electric Co. has filed articles of incorporation, with capital of $2,500,000. The company proposes to improve and extend the lines to Old Mexico. Epes Randolph, Pres.; E. S. Ives, Secy.; C. W. Hinchliffe, Gen. Mgr. Headquarters will be at Tucson. Company proposes to furnish electric light and power also.

LEVEE CONSTRUCTION.—Woodland, Cal.—At a joint meeting of the Commissioners of Public Works, the Auditing Board and the Board of Supervisors of this county, M. A. Nurse, Ch. Engr., stated that the Sacramento river from Grays Bend to the upper line of Reclamation District 537 must be improved by a levee system. The distance is 25 miles; the estimated cost is $25,000. The levees would be from seven to eight feet in height.

DIKES.—Painted Post, N. Y.—Village has voted to issue bonds to the amount of $12,500 for the construction of a diking system to protect the Village from floods. A Board of River Commissioners has been appointed to supervise the work, composed of H. L. Hollister D. M. Sayles, J. D. Orcutt, D. G. Lane and J. S. Moran. Plans have been prepared. Bids probably will be received about August 1. H. L. Hollister may be addressed.

FERRY HOUSES.—Jersey City, N. J.—It is reported that the Delaware, Lackawanna & Western and the Erie Railway companies will establish ferry houses at 13th St., Jersey City, near the tunnel through which the trolley cars will be operated between Jersey City and Manhattan. It is also rumored that the flats near the tunnel entrance in Jersey City will become a vast trolley yard, from which cars will be run directly over all the existing lines in Jersey City and Hoboken.

CANAL.—Beaumont, Tex.—The United Oil and Refining Co., J. S. McNamara, vice-Pres. and Gen. Mgr., has let the contract to John T. Ireland for the construction of a canal from the company's plant at Spindle Top to the Neches river, about 1¼ miles distance. It will be 7,480 ft. long, 8 ft. deep, 35 ft. wide at the bottom and 50 ft. wide at the top. This, it is considered, will be of sufficient size to float the large barges from the hill to tidewater at Port Arthur. Cost, about $30,000.

TUNNEL.—Jeddo, Pa.—Bids are asked until July 15 for driving a tunnel in Highland No. 5 colliery, about 150 yds. long, from Muck Mountain Vein to Buck Mountain Vein. To be 14 ft. wide and 7 ft. high above the rail, with a ditch on one side 2 ft. wide on top, 1½ ft. wide on the bottom, and 1 ft. deep below the bottom of the ties. Contractors are to name separate price per lineal yard for driving the tunnel through rock, slate and coal; measurements to be taken along the axis of the tunnel. G. B. Markle & Co.

TUNNEL, IRRIGATION, ETC.—Prescott, Ariz.—W. F. P. Fogg, legal representative of the Yavapai Copper Co., recently presented a proposition to some of the citizens of Prescott, which was approved, for the development by tunneling through the mountains a distance of five miles. Also to run an electric line through that tunnel to connect Prescott, Jerome and the Verde Valley and to obtain water for irrigation. Cost estimated at $5,000,000. Dennis A. Burke, J. C. Martin, E. A. Rogers, and others of this city, are said to be interested.

BARGE CANAL.—Albany, N. Y.—Henry A. Van Alstyne State Engr., will advertise for bids for work in connection with the new barge canal, which includes the Waterford locks, three in number and canal between; canal between Northumberland and Ft. Edward; stretch of canal six miles in length and lock, east of Oneida; stretch of canal eight miles in length, east of Clyde, near Savannah; stretch of eight miles, west of Rochester; stretch of about seven miles, near Medina; $10,000,000 available for this work. Work probably will be completed in two years.

SUBWAY.—Savannah, Ga.—Bids are asked by Geo. M. Gadsen, Director of Public Works, until July 26 for furnishing all labor, tools, material, etc., required for the excavating and removing soil, constructing retaining wall, abutments and parapets for subway in Gwinnett St., at the Atlantic Coast Line Railroad crossing. Work approximates the following quantities: Excavating and removing 10,300 cu. yds. of soil; furnishing and constructing 67,000 ft. B. M. timber foundations and driving 568 piles; furnishing and constructing 2,200 cu. yds. of concrete masonry; furnishing in place 154 lin. ft. of coping stone, 2.6 x 1.6 in length, of 5 ft. and under.

WATERWAY.—York, Pa.—The plan to make the Susquehanna River navigable from the Bay to Sunbury, which is being agitated by boards of trades and merchants' associations in the Susquehanna Valley, has led to a project launched by York capitalists to restore the navigation of the Cordorus Creek from the mouth to Loucks's mill in the event of the opening of the Susquehanna River. The plan is to deepen the stream by use of backwater from 20 locks and dams. The creek would be made navigable for tugboats for the transporting of coal from the river and of York's manufactured articles and grain output to vessels in the river. It is estimated that the stream could be made navigable six months in the year at a cost of $2,000,000.

MEXICO.

RAILWAYS.

APULCO.—The Mexican Central has been granted an extension of time, to June 30, 1907, to finish 50 kilometers of the line from Apulco to Tampico, known as the Honey road. The whole road must be completed by Dec. 31, 1905.

CHIHUAHUA.—John P. Ramsey, Gen. Mgr. of the Sierra Madre and Pacific railroad, running from Juarez to Casas Grandes, Chihuahua, is reported as stating that the proposed extension of this road to the Pacific ocean is not to be begun at present.

CITY OF MEXICO.—Luis del Paso of this city, representing the Hornos & Mazapil Ry. Co., has obtained an extension of time to June 8, 1906, in which to complete the second section of 15 kilometers; 10 kilometers must be built each succeeding year until the line is finished.

SONORA.—The Southern Sonora and Alamos railway, to run from Alamos, in the state of Sonora, to a point to be determined on the gulf coast, near Point Santa Cruz is to be built. The line will be about 151 kilometers long. The firm of Laselle and Jennings has the contract to construct the line. A concession was some months ago granted to the Cananea, Yaqui River and Pacific railway to build a line from Cananea to Alamos, and this is the same line under a different name, it is reported.

STREET AND ELECTRIC RAILWAYS.

CHIHUAHUA.—A concession has been granted by the state government to Maximo Krakauer, vice-Pres. of the Mineral railroad, for an aerial tramway to connect the road at Santa Eulalia with the principal mines in the vicinity. The concession is for a line 4,000 meters long, with an additional length of 4,000 meters if necessary. Freedom of taxation for ten years is granted the capital invested. The work must be completed within two years.

GUADALAJARA.—It is reported that extensions and additions will be made to rolling stock of the Guadalajara Street Railway Co. Juan Martinez Negrete, Guadalajara, is Mgr. He may be addressed.

MERIDA, YUCATAN.—Antonio Zaldivar, of Merida, has sold the concession held by him for the construction and operation of an interurban tramway between Hunucma and San Antonio, touching the intermediate towns of Somojil, Kinchil and Tetis, to a Yucatan syndicate of capitalists, consisting of Eusebio Escalante Bates, Carlos Peon Machado and Nicholas Escalante Peon. The construction of the road, that is proposed to be operated by electric power, will be pushed.

MEXICO CITY.—It is reported the Federal District Street Railway company is considering the construction of a belt line touching all the important suburban points. It is said the scheme is to build from San Lazaro to Peralvillo, from Peralvillo to Santa Maria, from Santa Maria to San Rafael, from San Rafael to La Viga, and thence to San Lazaro, forming a circuit.

PUEBLA.—The Puebla Street Car Company has received a concession permitting it to construct a circuit line. It will be called the southwestern circuit.

MONTEREY.—E. S. Mackin, of Mackin & Dillon, contractors, has been granted an extension of time until December 5 next, to build the proposed electric railways in Monterey and to convert the two mule lines to electric motive power.

TAMPICO, TAMAULIPAS.—It is reported that a company has been formed in Tampico to build a new electric street railway system, the power to be generated by water from a fall near the city.

LIGHT AND POWER PLANTS.

CITY OF MEXICO.—Antonio A. Mott, who has a concession for waters from the Ozoloapam river, in cañon of Acayucan, is proceeding with arrangements to install a plant to generate electricity.

TEPIC.—Alfred Lonergan, Cristobal Villanueva and Estiridion Ramirez, all of Ixtian del Rio, Territory of Tepic, have organized a company to build an electric light plant at a cost of about $40,000, it is reported.

VELARDENA, DURANGO.—The American-Mexico Co., with headquarters in Chicago, will construct an extensive power plant here, according to Dr. A. T. Grove, the Secy. of the company, as quoted in a local paper. Bids will be invited for the necessary equipment shortly.

The Power & Mining Machinery Co., 52 William St., New York, formerly the Loomis-Pettibone Gas Machinery Co., recently secured a contract for a 3,000 HP. plant, consisting of Crossley gas engine and general electric generators for the Velardena Mining & Smelting Co.

Information concerning contracts to be let or supplies to be furnished, and corrections of errors and omissions in published items, are invited. Full details regarding the equipment, tools, etc., required for the proposed improvements are specially desired.

BUILDINGS.

CHIHUAHUA.—The plans for a new market house building have been prepared by Alfred Giles, Arch., of San Antonio, Tex. Contract will be let when plans are approved by the city council.

CULIACAN, SINALOA.—The state capitol building at this place is to be repaired. Governor Canedo can give information.

SAN LUIS POTOSI.—Many new buildings are under consideration or are in course of erection. Henry B. Glover, a contractor, can give information.

WATER-WORKS.

LA PAZ, LOWER CALIFORNIA.—The extensive landed estate of Flores, Hale & Company, situated adjacent to Magdalena Bay, has been purchased by a syndicate of Boston, Mass., capitalists who will establish a system of irrigation with the view of placing many thousands of acres of the land under cultivation. The syndicate will establish a colony of American farmers on the land, it is said.

SEWERAGE.

CIUDAD PORFIRIO DIAZ, COAHUILA.—The Mexican Federal Government has appropriated $1,007,000 for the construction of a drainage and sewerage system here. It is expected that work will be begun this year. The construction of the sewers will be under the supervision of Federal engineers.

STREETS AND ROADS.

CHIHUAHUA.—A survey is being made by M. A. Knapp for proposed wagon road from Camps of Ocampo, Pinos Altos and Concheño to Minaca. The Chamber of Commerce (Camara de Comercio Industrial, Agricola y Minera) is taking an active interest in the enterprise, originated by Dennis Minihan and other prominent mining men here, and has addressed Governor Terrazas a letter asking the state to grant a subsidy for the building of the road.

NAVIDAD, JALISCO.—The United Mexican Mining & Milling Co., contemplates building a wagon road from its mines to the port of Las Penas, on the Pacific coast.

MANUFACTURING PLANTS.

CHIAPAS.—The Tropical Plantation Co. is to build a sugar mill. Frank J. Swern, Asst. Gen. Mgr., is in St. Louis consulting the stockholders of the company in regard to the installation of the plant.

CHIHUAHUA.—Local reports state that the Compania Industrial Mexicana, Juan A. Creel, Gen. Mgr., has contracted with J. M. Evans, inventor of the "Evans Multiphase Rotary Engine," for the patent rights in Mexico and to manufacture this newly invented engine in that country.

CORDOVA, VERA CRUZ.—Charles L. Seeger, Primera de Humboldt No. 12, City of Mexico, representative of the Whitney Iron Works Co., and John H. Murphy, of New Orleans, has contracted with the Motzorongo Company of 218 Reaper Block, Chicago, Ill., for installation of complete sugar machinery plant for their hacienda of Motzorongo, near this city. Total cost, $250,000.

VALLE DE GONZALEZ, GUERRERO.—A French company has installed a plant here for utilizing graphite that it is mining on an extensive scale.

SAN LUIS POTOSI.—A mill for the manufacture of robozos and silk cloth is to be established here. Penitentiary convicts will be employed.

MINING AND MISCELLANEOUS.

ARIZPE, SONORA.—G. A. Bennett, of Douglas, Ariz., has leased the Porfirio Diaz mine situated in this district and will install machinery and develop the property on an extensive scale.

ALTAR, SONORA.—A 50-stamp mill will be erected on the Cerro Colorado mine, situated in this district, about 50 miles west of Santa Ana. George B. Farnshaw is owner of the property and can give information in regard to the proposed improvements.

AMECA, JALISCO.—The capacity of the stamp mill at the Lupita mine, situated near here, is to be increased. A new pipe line is also being constructed for the purpose of increasing the water supply. This mine is owned by a syndicate of Colorado Springs, Colo., capitalists. Patrick Fitzgerald is manager.

CHIHUAHUA.—The construction of the proposed dam across the Chuvicar river, which will provide storage for water for the city of Chihuahua will commence in January or February next. The state has appropriated $200,000 for the work. Señor Marroquin, of the city of Chihuahua, is the engineer who is preparing the plans for the work.

CARRIZAL, GUERRERO.—The New York company which is operating the Carrizal gold mines at this place will install pumps to unwater the mines. The installation of a complete electric plant and hoist was contemplated at the time the mines were unexpectedly flooded. J. R. Butler is Pres. of the company.

CHIHUAHUA.—Joseph L. Giroux, of Los Angeles, Cal., owner of the Sultana mine at Copete, Sonora, will soon erect extensive reduction plant.

CHOIX, SINALOA.—J. W. Fisk, of Choix, according to reports, expects to install a mill in the near future.

CITY OF MEXICO.—A correspondent informs us that Capt. Charles Holt, of New York, is said to have closed the deal for the purchase of Mt. Popocatepetl volcano from Gen. Gaspar Sanchez Ochoa. Capt. Holt represents a syndicate of American and Mexican capitalists in the transaction, among those interested being James A. Roberts, ex-Comptroller, and A. B. Colvin, ex-Treasurer of New York state; Lyman S. Andrews, of New York; Lic. Luis Mendez, legal representative of the Mexican Central Railroad; Dr. Eduardo Liceaga, Pres., of the Superior Bd. of Health of Mexico. The plans of the new owners of Mt. Popocatepetl embrace the construction and operation of a cog-wheel railway from the base of the mountain to its summit and the installation of machinery for mining the vast deposits of sulphur that are said to exist in the crater of the volcano. According to an official report made by the Mexican Government the crater contains more than 148,000,000 tons of sulphur. The syndicate has also purchased 100,000 acres of land situated on and adjacent to the mountain. Water power that is to be used to generate electrical energy is located on this land. The organization of the company that is to undertake this work is said to be practically completed. Capital stock is $5,000,000, of which more than $900,000 (gold) has already been paid in.

READERS' WANTS

This Department contains special requests, and detailed items, from persons in the market for supplies, and from others asking for the names and addresses of firms manufacturing certain tools, machinery and supplies required for work in which they are interested. ENGINEERING NEWS will be glad to furnish at once, free of cost, names and addresses of firms making the machinery or material desired, after which the item will appear in this column, UNLESS OTHERWISE REQUESTED, which request will be honored absolutely. The information in all cases will be sent to our advertisers handling the material wanted, or to other firms should it be out of the line of our advertisers. Every day we are receiving such requests with the understanding that it must not appear in the paper.

CEMENT, CONCRETE MIXERS.—Kenosha, Wis.—B. J. Ashley informs us that he is in the market for cement and concrete mixers.

RENT TWO ROAD ROLLERS.—New York.—B. F. Bell & Co., 220 Broadway, inform us that they desire to rent two road rollers.

CONCRETE MIXERS.—Richmond, Va.—The Mankin Construction Co. writes us that they are in the market for concrete mixers.

PAVING BRICK.—Duncannon, Pa.—Wm. A. Holland, Jr., writes us that he would like the names and addresses of firms handling paving brick.

HOISTS, STEEL CARS, CABLE, SWITCH, RAIL (12-16-lb.).—Norwalk, O.—R. E. Mesnard, Civil Engr., writes us that he is in the market for the above.

CONCRETE MIXERS, HOISTING ENGINES.—Chicago, Ill.—D. H. Hayes Co., 167 Dearborn St., informs us that they are in the market for concrete mixers and hoisting engines.

DREDGES, DITCHING MACHINES.—Howard City, Mich.—S. Lisk & Sons, Contractors, would like to hear from manufacturers or dealers in dredges and ditching machines.

ELECTRICAL COOKING APPARATUS.—Morgantown, W. Va.—Weaver & Zevely, Contractors, write that they would like to be put in touch with firms manufacturing or handling electrical cooking apparatus.

CEMENT, EXPANDED METAL, WOOD STAND-PIPE, WIRE ROPE.—Zillah, Wash.—R. K. Tiffany, Engr., Washington Irrigation Co., writes for the names and addresses of firms dealing in or manufacturing the above.

ROAD SCRAPERS, INSTRUMENTS, COAL-HANDLING MACHINERY, DUMP WAGONS, CONCRETE MIXERS, CONVEYORS, DITCHING MACHINES, PILE DRIVERS, ROAD ROLLERS, IRRIGATION AND SEWAGE PUMPS, WELL DRILLING MACHINERY.—San Francisco, Cal.—J. W. Evans, Secy. Shaw Trade Library, Inc., writes us for information regarding the above.

MEXICO—Continued.

CHIHUAHUA.—The Chicago-Mexico Mines Co., a new corporation, has organized to take over the Chicago mine, 40 miles west of Cusihuiriachic, this state, that belongs to Platt McDonald and associates. Dr. C. B. Reed, of Chicago, is Pres.

CITY OF MEXICO.—The Evanston Mining Co. has been incorporated at Evanston, Ill., to purchase and operate the "La Purisima" mine in the Torreon district. A reduction plant is contemplated at an early date.

CITY OF MEXICO.—Judge A. B. Fall, of El Paso, Tex., is interested in the Cerro Boiuda mine, and the erection of a mill is contemplated at the property.

CITY OF MEXICO.—The committee on public works of the municipal government has authorized the construction of a new causeway from Guadalupe to the towns of San Marcos, Espinal, Tabiques and San Ildefonso, all suburbs of the city.

CITY OF MEXICO.—Rich beds of iron ore have been discovered near San Miguel, in state of Mexico, and a company is being organized to establish a furnace there, with capital of one million. Machinery and all modern apparatus will be used.

COMPAS, SONORA.—The San Jose Consolidated Mining Co. will erect a concentrating plant and install a large amount of machinery at its mine, situated 18 miles west of this place.

COPETE, SONORA.—It is reported that an extensive reduction plant will shortly be erected at the Sultana mine, the property of Joseph L. Giroux, of Los Angeles, Cal. The mine is located at Copete, Sonora.

DURANGO.—The American-Mexican Mining Development Co., of 35 Wall St., New York, is preparing to build a smelting plant in state of Durango, with capacity of 1,000 tons per day.

DURANGO.—Rafael Bracho, of Durango, is to construct a dam in the Sauceda river, at a point called Charco Grande, in one of his haciendas. Work will commence on the termination of the rainy season.

EBANO, TAMAULIPAS.—It is reported the Mexican Petroleum Co., with wells at Ebano, on the Penuco River, is to construct a canal connecting the river with the terminus of its railroad. The canal will be commenced at once. It will be about 3½ miles long.

GUADALAJARA.—Manuel Cuesta Gallardo, of this city, is preparing to make extensive improvements at Lake Chapala. The survey is now being made for a proposed protection wall along the lake shore.

JALISCO.—David H. Sands, who controls extensive mining properties in Jalisco, is preparing to develop them, and will soon be in the market for the necessary mining equipment. Address Engineer John Beck, Guadalajara, Jal.

OAXACA.—A company is being organized in the Ejutla District, on the Penoles group of mines, near the city of Oaxaca, to erect a 20-stamp mill. W. H. Dudley, of the city of Oaxaca, can give information.

OAXACA.—C. H. Andros, a mine operator, of Oaxaca, has purchased the Leona group of mines, 70 miles from Oaxaca, and will resume their operation and development.

PARNASO, JALISCO.—The San Rafael Mining Co. will install a plant to treat the tailings at its mine near here. The company has also made arrangements for increasing its water supply.

SAYULA, VERA CRUZ.—S. Pearson & Son, Ltd., have obtained a concession to prospect for oil near here. In return for this privilege the concessionaires agree, should oil be discovered in paying quantities, to erect and maintain a large educational institution here.

FOREIGN CONTRACTS—EXPORT NEWS.

ELECTRIC PLANT.—Switzerland.—Towns of Zweisimmen (Canton of Berne), and Murg (Canton of St. Gall) will erect plants for electric lighting and supplying power.

REMODELING LOCK GATES.—Egypt.—Bids are asked until August 5, not on July 18, as stated last week, for the remodeling of the Mahmoudia lock gates in Alexandria. This work includes the supply and erection of two pairs of wrought-iron lock gates. Bids to be addressed to the Inspector of Irrigation, Third Circle, Alexandria.

CAST-IRON PIPES.—Java.—Bids are asked by Netherlands Colonial Office until August 30 for supplying about 1,371 tons asphalt-coated cast-iron socket pipes for waterworks of Djoewana and Ambarawa, Java. Delivery to be at Semarang, Java. Specifications and drawings may be obtained from Martinus Nyhaff, Novel Street 18, The Hague, Holland, upon payment of Fl. 2 50. (Advertised, Engineering News.)

STEELWORK.—South Africa.—Bids are asked until July 29 by the Johannesburg Town Council for the manufacture and supply of the whole of the steelwork required for the electric car shed buildings, and for a bridge over the railway at Twist St. Tenders should be addressed to the Town Clerk, Johannesburg, or to Mordey & Dawbarn, 82 Victoria St., Westminster, S. W., London. Estimated cost of sheds is about $200,000.

ELECTRIC LIGHTING MATERIAL.—Spain.—Bids are asked until July 30 for the electric lighting of Belmez, Pueblo Nuevo del Terrible and Penarroya, for a period of seven years. Tenders will be received by the Ayuntamiento of Belmez. A provisional deposit of 582½ pesetas (about $110) will be required from persons bidding. It appears that the personal attendance of tenderers or persons duly authorized by them is required at the adjudication.

OILS.—Cape Colony.—Bids are asked until August 8 by the Cape Government Railway Department for the supply of 75,000 gals. of paraffin oil and 3,000 gals. of lard oil. Forms of tender and particulars may be obtained at the offices of the Commercial Intelligence Branch of the Board of Trade, 73 Basinghall St., E. C., London, Eng'and, and tenders should be addressed to the Controller and Auditor-General, Capetown, marked "Tenders for Oils."

TELEPHONE SERVICE.—Spain.—Bids will be asked for the installation and working of a telephone system and central station at Berga and sub-stations at Gironalla, Puigreig, Balsareny, Sallent, Castelladral y Cardona. Tenders will be received at the office of the Direccion-General of Posts and Telegraphs, 10 Calle de Carretas, and at the Office of the Civil Governor, Barcelona, a provisional deposit of 2,000 pesetas (about $380) being required from persons tendering. The maximum period for the concession is for 20 years, and the letting of contracts will turn on the reduction of this period.

RAILROAD.—Nicaragua.—The St. Louis "Globe-Democrat" quotes Señor Ingenfero Don Alejandro Bermudez, Engr.-in-Chief of the Republic of Nicaragua, as stating that the proposed interoceanic railway, "a regular 3-ft. 6-in. narrow-gage one, will be equipped in the best and most modern manner, the rails, cars and other materials for construction coming from the United States." This project is the completion of the railway running from San Miguelito, on Lake Managua, to Monkey Point, on the Atlantic coast, a short distance to the southward of Bluefields and the Mosquito Indian reservation, over 200 miles. Señor Bermudez may be addressed at 3833 West Pine Boulevard, St. Louis, Mo., for the time being.

HARBOR IMPROVEMENTS.—Italy.—Bids are asked until July 20 for harbor improvements at Spezia. The work includes (a) the dredging of a channel leading to the commercial harbor and preparation of the foundations for the extension of the quays, at the estimated cost of 240,000 lire (about $45,600); (b) the prolongation of the existing pier, quays and breakwater, at the estimated cost of 738,470 lire (about $140,310). Tenders will be received at the Ministry of Public Works, Rome. The final date for the presentation of betterments on the provisional adjudication expires on August 4. British Consular reports that the total sum sanctioned for expenditure on harbor improvements at Spezia is 1,450,000 lire, consequently a balance of 471,530 lire still remains available, and will be eventually devoted to furnishing the necessary appliances and accessories, such as cranes, goods sheds, lighting, etc., etc., which will all doubtless be the subject of further contracts in due course.

PUBLIC IMPROVEMENTS.—Panama.—H. A. Gosling, Consul-General, in reporting proposed improvements in Panama, states that National Assembly has appropriated sums for various provinces, as follows: Province of Panama, $1,000,000; Province of Colon, $300,000; Province of Chiriqui, $450,000; Province of Cocle, $350,000; Province of Los Santos, $350,000; Province of Vera Aguas, $300,000; Province of Bocas del Torro, $450,000. The President of the Republic will send to each one of the Provincial engineers and architects, whose duty it shall be to study the various improvements contemplated and present plans and specifications showing cost, etc., of each. These plans and specifications must be submitted to the secretary of public works on or before Dec. 31 next. An act passed gives the President the right to admit free of duty all material used in these public improvements. The improvements for the Province of Panama consist, in part, of the following; capitol or public government building; municipal palace; palace of justice; library and museum; university; university for the sciences; school of arts, offices and commerce; theater; police station; public jail, and a normal college for young men. In the other provinces the improvements include the erection of houses for the governors, police stations, normal schools, prisons, court houses, hospitals, boring artesian wells, erecting bridges of iron and wood across rivers and streams, opening up public roads through the interior, cleaning harbors and opening up rivers, establishing electric plants in various municipalities,, erecting light-houses. Hon. Manuel Quintero V., Secy. of Public Works, Panama, may be addressed for further information.

CONTRACT PRICES.

[Where (*) precedes items under Contract Prices the work was advertised in Engineering News.]

*PINE BLUFF, ARK.—Following bids were received June 20 by Board of Improvement for constructing a system of sanitary sewers for Sewer District No. 3; Theo. Hartman, Engr., Little Rock; (1) Irwin, Koester & Gallager, New Orleans, La.; (2) Myers Const. Co., St. Louis, Mo.; (3) Miller Paving Co., Memphis, Tenn.; (4) Beulah-Cooney Const. Co., St. Louis, Mo.; (5) Jno. Gilligan Co., Falls City, Neb.; (6) Robinson Bros., Pine bluff, Ark.; (7) Frank, Schefold & Beeman, Louisville, Ky.; (8) Doyle & Swartz, Colorado Sprinks, Colo.; (9) Dunnegan & Sykes, Shanendoah, Ia.:

Bids received at Pine Bluff, Ark., June 20, 1904, for Constructing a System of Sanitary Sewers.

Items.	Quantities.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
6-in. vertical house connections.	4,000 ft.	$0.35	$0.18	$0.22	$0.15	$0.20	$0.12	$0.10½	$0.15	$0.14
6 x 4-in. branches.	126....	.64	.30	.25	.20	.22	.15	.30	.25	.40
8 x 6-in. "	1,200....	1.12½	.40	.30	.30	.35	.20	.50	.35	.60
10 x 6-in. "	43....	2.00	.60	.50	.50	.50	.25	.80	.50	.90
6-in. sewer, 0 to 6 ft. deep..	2,160 ft..	.25	.28	.24	.24	.34	.30	.22	.38	*.26
" " 6 to 8 " ..	2,245 ft..	.28½	.34	.29	.31	.41	.35	.26	.50	.29
" " 8 to 10 " ..	200 ft..	.40	.45	.39	.46	.45	.45	.35	.55	.36
8-in. sewer, 0 to 6 " ..	18,025 ft..	.25	.35	.31	.32	.38	.33	.25	.47	.32
" " 6 to 8 " ..	16,065 ft..	.33½	.41	.35	.36	.48	.42	.30	.52	.35
" " 8 to 10 " ..	10,295 ft..	.42	.52	.42	.48	.52	.52	.37	.57	.40
" " 10 to 12 " ..	2,255 ft..	.60	.70	.57	.60	.63	.70	.50	.62	.54
" " 12 to 14 " ..	1,480 ft..	.80	.95	.72	.80	.77	.88	.55	.65	.66
" " 14 to 16 " ..	660 ft..	1.20	1.40	.90	1.31	.86	1.07	.70	.70	.78
" " 16 to 18 " ..	1,200 ft..	1.50	1.70	1.25	1.61	1.15	1.25	1.00	.75	.96
10-in. sewer, 8 to 10 " ..	200 ft..	.50	.59	.54	.55	.59	.65	.45	.69	.54
" " 12 to 14 " ..	310 ft..	.90	1.02	.85	.99	.65	.99	.60	.77	.75
" " 14 to 16 " ..	310 ft..	1.35	1.47	1.05	1.45	.94	1.17	.80	.82	.90
" " 16 to 18 " ..	690 ft..	1.75	1.77	1.45	1.95	1.13	1.35	1.10	.95	1.05
" " 18 to 20 " ..	310 ft..	2.30	2.07	1.75	2.16	1.50	1.67	1.30	1.07	1.24
" " 20 to 22 " ..	1,120 ft..	2.50	2.27	2.15	2.24	1.95	1.85	1.50	1.25	1.48
C. I. pipe, 8-in. dia., 132 ft.....	5,280 lbs.	1.25 ft.	.01½	.02	.014	.024	.03	.014	.02½	.02
Brickwork	7 c.yd	12.00	8.00	9.00	8.00	15.00	8.40	9.00	10.00	
Manholes	1,200 ft..	3.30	2.70	2.34	2.50	3.50	3.00	3.60	2.50	2.00
Drop connections	90 ft..	1.10	.50	.....	.....	.....	.20	.50	.45	1.00
Flush tanks, 5 in. syphon	27....	60.00	55.00	58.00	49.50	50.00	42.50	50.00	67.00	40.00
Flush tanks, alternating	10....	85.00	80.00	85.00	78.50	80.00	75.00	75.00	105.00	50.00
C. I. in rings and covers	60,000 lbs.	.02½	.02½	.02	.02¼	.02¼	.02½	.02	.03¼	.02
⅛-in. gal. iron pipe, laid	4,500 ft..	.12½	.....	.10	.....	.....	.06	.09	.12	.10
Rip-rap	60 c.yd	.....	2.50	3.00	.....	.....	3.00	3.00	3.75	3.00
Concrete	20 c.yd	10.00	8.00	6.45	7.50	9.00	7.00	8.00	7.60	10.00
Bearing piles per ft.		.80	.75	1.50	.50	.45	.50	.30	.50	.50
Sub drains, 3-in		.10	.10	.18	.08	.20	.07	.06	.20	.04
" 4-in		.12	.12	.19	.10	.24	.09	.08	.25	.06
" 6-in		.15	.18	.20	.15	.30	.11	.10	.30	.....
⅛-in. lead pipe per ft.		.....	.15	.30	.14	.30	.30	.15	.30	.30
Earth excavation per cu. yd		.80	.50	.50	.38	.50	.18	.40	.30	.48
Laying c. i. pipe per ft.		.....	.....	.15	.....	.50	.....	.04	.....	.....
Totals		$37,980	$39,730	$34,468	$36,405	$40,300	$37 750	$30,888	$41,522	$31,684

ELECTRIC LIGHT PLANT.

Washington, N. C.

Sealed proposals will be received by the Committee of Improvements of Washington, N. C., until 12 o'clock m., July 28, 1904, for erecting and installing, complete, an Electric Light Plant. The proposed plant embraces two 178-HP. Medium Speed Engines, two 120-KW. A. C. Generators, 75 Light Series Arc System and Pole Line.

For specifications, form of proposal, etc., address the Engineer.

E. F. STEWART, Chairman.
J. L. LUDLOW, Engineer.
Winston-Salem, N. C. 2-1t

DREDGING IN RARITAN RIVER.

Perth Amboy, New Jersey.

Bids are wanted by Jos. Falcon, Contractor, care Packer House, Perth Amboy, for dredging in Raritan River, for trench 2,000 ft. long, 8 ft. wide and 6 ft. deep. The work is in soft dirt. 26-2t

For other Proposal Advertisements see pages 35, 36, 37, 38 of Advertisements and Construction News Page 22.